

FINAL
Environmental Assessment and Environmental Baseline Survey
for the
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority

Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW)
Pittsburgh International Airport Air Reserve Station

August 9, 2012

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 09 AUG 2012		2. REPORT TYPE N/A		3. DATES COVERED -	
4. TITLE AND SUBTITLE Environmental Assessment and Environmental Baseline Survey for the Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 911th Airlift Wing/CE, Pittsburgh IAP ARS, 1100 Herman Avenue, Coraopolis, PA 15108-4421				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT SAR	18. NUMBER OF PAGES 715	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

FINAL FINDING OF NO SIGNIFICANT IMPACT (FONSI)

NAME OF THE PROPOSED ACTION

Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority, 911th Airlift Wing (911 AW), Pittsburgh International Airport Air Reserve Station, Moon Township, Pennsylvania.

ENVIRONMENTAL ASSESSMENT AND ENVIRONMENTAL BASELINE SURVEY

An EA/EBS was conducted to evaluate the environmental impacts of the proposed action and alternatives on the affected environment in accordance with the requirements of the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations, Air Force Environmental Impact Analysis Process (32 *CFR* 989), and Air Force Instruction (AFI) 32-7061. This EA/EBS is attached and incorporated herein by reference.

DESCRIPTION OF THE PROPOSED ACTIONS AND ALTERNATIVES

Proposed Action: The Air Force Reserve Command (AFRC) and 911 AW are pursuing the acquisition by lease of an approximately 26 acre parcel of property (“T-Ramp”) owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT). The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. It would provide the 911 AW with a contiguous, easily accessible and secure leased area required for 911 AW operations. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA, which expired on December 31, 1995, but was temporarily extended several times, most recently expiring on December 31, 2012.

The following alternatives to the proposed action were identified:

- **No-Action Alternative:** The 911 AW does not acquire the T-Ramp property by lease.
- **Alternative 1:** Continue to extend MOA annually.
- **Alternative 2:** Lease less than the approximately 26 acres of space at the T-Ramp.
- **Alternative 3:** Consider other contiguous locations that satisfy purpose and need of this action.
- **Alternative 4:** Consider other non-contiguous locations that satisfy purpose and need of this action.

Based on the analysis of this EA/EBS, alternatives 1 through 4 were identified as not practicable alternatives to the proposed action for those reasons identified in Section 3.2.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Section 5 of the EA/EBS provides an analysis of the environmental impacts of the proposed action and no action alternative on the affected environment described in Section 4. Neither would result in significant impacts to the affected environment as described below:

- **Land Use:** The 911 AW plans to continue the use of the T-Ramp in accordance with the MOA. Neither the proposed action nor the no action alternative will adversely impact the current land use by ACAA or the 911 AW.

- **Airspace Management:** Neither the proposed action nor the no action alternative will change the Controlled Airspace around Pittsburgh IAP ARS or adversely impact the procedures established to manage and control air traffic in the area.
- **Noise:** Neither the proposed action nor the no action alternative will increase noise levels, nor will they exceed the FAR Part 150 threshold increase for significant impact (1.5 DNL) to trigger additional evaluation.
- **Air Quality:** Since the proposed action will not increase air emissions, neither the proposed action nor the no action alternative will adversely impact air quality. In addition, the proposed action is presumed to conform to the SIP and no further conformity analysis is required.
- **Safety and Occupational Health:** Neither the proposed action nor the no action alternative will increase the need for greater levels of protection for safety and occupational health of the Pittsburgh IAP ARS, ACAA personnel or the public.
- **Hazardous Substances:** Neither the proposed action nor the no action alternative would introduce new or increased levels of hazardous substances to the T-Ramp or surrounding properties.
- **Earth Resources:** As earth disturbance is not associated with the proposed action or the no action alternative, earth resources at and adjacent to the T-Ramp will not be adversely impacted.
- **Water Resources - Stormwater:** As the T-Ramp will only be used for parking military aircraft, neither the proposed action nor the no action alternative will adversely impact stormwater.
- **Water Resources - Drinking Water Quality:** As no drinking water wells are located within or near the T-Ramp, neither the proposed action nor the no action alternative will adversely impact drinking water quality.
- **Water Resources - Groundwater:** As the T-Ramp will only be used for parking military aircraft, neither the proposed action nor the no action alternative will adversely impact groundwater.
- **Water Resources - Wastewater:** As the T-Ramp will only be used for parking military aircraft and no discharge of wastewater occurs from this area, neither the proposed action nor the no action alternative will adversely impact wastewater.
- **Biological Resources:** As the T-Ramp apron is located on the PIT airfield and does not have any areas which have been identified as wetlands or 50- or 100-year flood plains, neither wetlands nor flood plains will be adversely impacted by either the proposed action or the no action alternative. In addition, this predominantly paved area does not support any wildlife. Therefore, there are no known threatened, endangered, or locally rare wildlife species or habitats that will be adversely impacted by either the proposed action or the no action alternative.
- **Cultural Resources:** Because there are no cultural or historical resources identified at the T-Ramp or adjacent properties, neither the proposed action nor the no action alternative has the potential to impact on-site or adjacent cultural resources. Additionally, because neither the proposed action nor the no action alternative could affect historic properties, the above

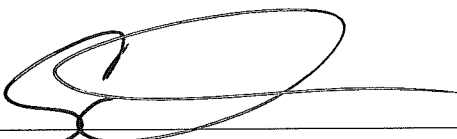
statement satisfies the 911 AW responsibilities under *Section 106 of the National Historic Preservation Act of 1966*.

- **Socio-economics:** Because neither the proposed action nor the no action alternative involves the displacement of residents or businesses, implementation of the federal *Uniform Relocation Assistance and Real Property Acquisition Policies Act* is not required. Therefore, neither the proposed action nor the no action alternative would adversely impact the socioeconomics of the surrounding population.
- **Environmental Justice:** As neither the proposed action nor the no action alternative will have any impact on human population, there will not be any disproportional environmental impact on minority or low-income populations.
- **Recreational and Visual Resources:** As the T-Ramp parcel is a secured, predominantly paved area located on the PIT airfield and there are no recreational or unique visual resources present, there are no adverse impacts to these resources from the proposed action or the no action alternative.
- **Transportation:** As the T-Ramp parcel is a secured, predominantly paved area located on the PIT airfield and is not accessible for transportation by the general public, there are no adverse impacts to transportation from the proposed action or the no action alternative.
- **Other:** The "EBS Phase II Investigation" (see Appendix I) determined that subsurface petroleum constituent concentrations at the T-Ramp did not exceed the non-residential PADEP Statewide Health Standards for soil or the non-residential, non-use aquifer PADEP Statewide Health Standards for groundwater. This confirms that all remedial actions necessary to protect human health and the environment have been taken due to the historic release and migration of hazardous substances or petroleum products that occurred (i.e., Jet A Fuel) at the adjacent Fuel Distribution System area from the former Old Terminal. No other sources of contamination were identified during the EBS Phase II that impacted the T-Ramp area.

CONCLUSION

Based on the analysis of the EA/EBS and after careful review of the potential impacts, I conclude that implementation of the proposed action at Pittsburgh IAP ARS would not result in significant impacts on the quality of the human or natural environment. Therefore, a Finding of No Significant Impact (FONSI) is warranted and an Environmental Impact Statement is not required for the proposed action.

In addition, the proposed action and no action alternative are not located within or would impact wetland areas. Therefore, a Finding of No Practicable Alternative (FONPA) to avoid wetland impacts is not required for the proposed action.


CRAIG C. PETERS, Col, USAFR
Commander, 911th Airlift Wing

27 SEP 12
DATE

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

PRIVACY ADVISORY

Comments on the Draft “Environmental Assessment and Environmental Baseline Survey” (EA/EBS) were requested. Letters or other written or oral comments provided are included in this final document as Appendix K. As required by law, comments were addressed in this final document and made available to the public. Any personal information provided was used only to identify your desire to make a statement during the public comment portions of any public meetings or hearings or to fulfill requests for copies of the final document or associated documents. Private addresses were compiled to develop a mailing list for those requesting copies of the final document. However, only the names of the individuals making comments and specific comments were disclosed. Personal home addresses and phone numbers were not published in this final document.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

[This page intentionally left blank]

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY	9
1. INTRODUCTION.....	13
1.1 Purpose of the Document.....	14
1.2 Purpose and Need for the Proposed Action	14
1.3 Organization of the Environmental Assessment and Environmental Baseline Survey	15
2. SURVEY METHODOLOGY	17
2.1 Approach and Rationale.....	17
2.1.1 Description of Documents Reviewed	17
2.1.2 Property Inspections.....	20
2.1.3 Personal Interviews.....	21
2.1.4 Sampling – EBS Phase II Investigation	21
3. PROPOSED ACTION AND ALTERNATIVES.....	33
3.1 Proposed Action.....	33
3.2 Alternatives	33
3.2.1 Alternatives	33
3.2.2 No-Action Alternative	34
3.2.3 Alternatives Considered But Eliminated From Further Consideration	34
3.3 Boundaries of the Property / Survey Area	35
3.3.1 Legal Description of Property to Be Transferred	35
3.3.2 Map	35
4. AFFECTED ENVIRONMENT	37
4.1 History and Current Use	37
4.1.1 History.....	37
4.1.2 Land Use	37
4.1.2.1 Current Land Use.....	37
4.1.2.2 Historic Land Use	38
4.1.3 Chain of Title	38

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

4.2 Environmental Setting	39
4.2.1 Topographic Features.....	39
4.2.2 Utilities Available to the Site.....	39
4.3 Airspace Management	40
4.4 Noise	41
4.5 Air Quality	42
4.6 Safety and Occupational Health.....	42
4.7 Hazardous Substances.....	43
4.7.1 Hazardous Materials and Hazardous Waste	43
4.7.2 Petroleum Products and Petroleum Waste.....	44
4.8 Installation Restoration Program Contamination - Open and Closed Sites.....	45
4.9 Storage Tanks.....	46
4.9.1 Aboveground Storage Tanks.....	46
4.9.2 Underground Storage Tanks	46
4.9.3 Pipelines, Hydrant Fueling, and Transfer Systems.....	46
4.10 Oil/water Separators.....	47
4.11 Solid Waste	47
4.12 Medical, Biological or Infectious Waste	48
4.13 Radioactive Waste	48
4.14 Pesticides.....	48
4.15 Ordnance	49
4.16 Asbestos	49
4.17 Polychlorinated Biphenyls	49
4.18 Radon	49
4.19 Lead-Based Paint	49
4.20 Earth Resources	50
4.21 Water Resources	51
4.21.1 Hydro-geologic Features.....	51
4.21.2 Drinking Water Quality	52
4.21.3 Groundwater	52
4.21.4 Wastewater Treatment, Collection, and Discharge.....	54

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

4.22 Biological Resources	54
4.22.1 Wetlands	54
4.22.2 Flood Plains	54
4.22.3 Protected Species	54
4.23 Cultural Resources	55
4.23.1 Archaeological / Historic Sites	55
4.23.2 Native American Issues	56
4.24 Socioeconomics	56
4.25 Environmental Justice	57
4.26 Recreational and Visual Resources.....	57
4.27 Transportation	58
5. ENVIRONMENTAL IMPACTS.....	59
5.1 Land Use	59
5.2 Airspace Management	59
5.3 Noise	59
5.4 Air Quality	60
5.5 Safety and Occupational Health.....	60
5.6 Hazardous Substances.....	60
5.7 Earth Resources	60
5.8 Water Resources	60
5.9 Biological Resources	61
5.10 Cultural Resources	62
5.11 Socio-economics	62
5.12 Environmental Justice	62
5.13 Recreational and Visual Resources.....	62
5.14 Transportation	63
5.15 Other	63
6. FINDINGS FOR ADJACENT PROPERTIES	65
6.1 Land Uses.....	65
6.2 Surveyed Properties	66
6.3 Potential Environmental Concerns	66

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

7. CUMULATIVE EFFECTS OF THE PROPOSED ACTION	69
7.1 Definition of Cumulative Effects.....	69
7.2 Past, Present, and Reasonably Foreseeable Actions	69
7.2.1 Past Actions Relative to the Proposed Action and No Action Alternative.....	69
7.2.2 Present Actions Relevant to the Proposed Action and No Action Alternative.....	70
7.2.3 Reasonably Foreseeable Actions that Interact with the Proposed Action and No Action Alternative	70
7.3 Cumulative Effects Analysis.....	70
8. APPLICABLE REGULATORY COMPLIANCE ISSUES.....	73
8.1 Compliance Issues	73
8.2 Description of Corrective Actions Taken or In Progress.....	73
9. CONCLUSIONS REGARDING SUITABILITY TO PROCEED WITH THE REAL ESTATE TRANSACTION	75
9.1 Facility Matrix	75
9.2 Property Categories.....	75
9.3 Natural Resources Maps	77
9.4 Data Gaps.....	77
10. RECOMMENDATIONS REGARDING PROCEEDING WITH THE REAL ESTATE TRANSACTION	79
11. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES	81
12. CONCLUSIONS AND RECOMMENDATIONS.....	83

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

APPENDICES	85
Appendix A: References	
Appendix B: Terms	
Appendix C: List of Preparers	
Appendix D: Persons and Agencies Contacted	
Appendix E: Maps and Aerial Photographs	
Appendix F: Site Photos	
Appendix G: Site Inspection Documents	
App G-1: Records Search Report	
App G-2: Interview Reports	
App G-3: Visual Site Inspection Forms	
App G-4: Hazardous Materials Inventory	
Appendix H: Certifications	
Appendix I: EBS Phase II Investigation (Format in accordance with Section 11 of ASTM E1903-97)	
Appendix J: General Conformity	
Appendix K: IICEP Contacts, Letters and Comments	
Appendix L: Deed Restriction for the Old Terminal Fuel Distribution System	
Appendix M: Notice of Availability and Proof of Publication	

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

[This page intentionally left blank]

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

EXECUTIVE SUMMARY

The Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property (“T-Ramp”) owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon Township, Pennsylvania. The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron (see **Figures 1 and 3**, Appendix E.)

The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement (MOA, see Appendix A, Reference no. 42) with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes during construction activity on the primary aircraft apron. This MOA expired on December 31, 1995, but was temporarily extended several times, most recently expiring on December 31, 2012. This property also provides additional apron space for the 911 AW’s visiting military aircraft, including Air Force One and supporting aircraft.

The 911 AW intends to lease this property from the ACAA for the following reasons:

- The current MOA expires on December 31, 2012;
- AFRC and 911 AW operations require the continued use of this parcel as defined in the current MOA;
- Portions of the pavement and joint sealant of the T-Ramp have been determined to be unsafe for aircraft operation by ACAA officials;
- ACAA has no plans to repair those portions of the T-Ramp property which have been determined to be unsafe for aircraft operations; and
- An extension to the MOA was considered by the AFRC but was disapproved, since this document did not contain sufficient binding language identifying levels of responsibilities, property restoration, and liability considerations that would otherwise be addressed in a lease agreement.

Typically, a real estate transaction action such as this would undergo a preliminary Environmental Impact Analysis (Air Force Form 813) resulting in “categorical exclusion” if no environmental impacts were identified. However, since a 1996 Phase I Environmental Baseline Survey (EBS) identified recognized environmental conditions (RECs) and classified this T-Ramp property as “Category 7,” the preliminary Environmental Impact Analysis determined that further evaluation was required before making a recommendation to proceed with the transaction. This recognized environmental condition was historical soil and groundwater contamination from the PIT Old Terminal Fuel Distribution System that was formerly located to the west of the T-Ramp.

Therefore, this **Environmental Assessment (EA)** and a **Phase II Environmental Baseline Survey (EBS)** was required to evaluate this REC through soil and groundwater

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

sampling and to also document the nature, magnitude, and extent of any other environmental contamination and environmental impacts associated with the lease of this property.

THIS EA/EBS IS ORGANIZED AS FOLLOWS:

Section 1 of the EA/EBS introduces the proposed action, describes the purpose and need for this action and presents the personnel that will be completing this evaluation.

Section 2 describes the methodology, approach and rationale that were used to complete this investigation and detailed the procedures utilized to complete the Phase II EBS, which was attached as a separate document (Appendix I).

Section 3 describes the proposed action and following alternatives:

- **No-Action Alternative:** The 911 AW does not acquire the T-Ramp property by lease.
- **Alternative 1:** Continue to extend MOA annually.
- **Alternative 2:** Lease less than the approximately 26 acres of space at the T-Ramp.
- **Alternative 3:** Consider other contiguous locations that satisfy purpose and need of this action.
- **Alternative 4:** Consider other non-contiguous locations that satisfy purpose and need of this action.

Based on the analysis of this EA/EBS, none of these alternatives were identified as practicable alternatives for the proposed action for those reasons identified in Section 3.2. Therefore, the EA/EBS only evaluated the proposed action and the no action alternative in detail.

Section 4 describes the environment of the areas to be affected by the proposed action and no action alternative for twenty-seven different categories.

Section 5 describes the environmental impacts of the proposed action and no action alternative on the affected environment categories presented in Section 4. None of the alternatives would result in significant impacts to the affected environment.

Section 6 evaluates the potential impact of adjacent and surrounding properties on the T-Ramp. No surrounding properties were identified that pose a potential environmental risk or adverse impact to the T-Ramp property.

Section 7 evaluates the cumulative impacts associated with the implementation of the proposed action and the no action alternative, while considering the incremental contribution of past, present, and reasonably foreseeable actions. The proposed action represents status quo conditions and would not represent any change from the existing environment.

Section 8 describes any applicable regulatory or compliance issues. There are no outstanding issues of regulatory non-compliance associated with the T-Ramp.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Additionally, there are no “Corrective Actions Required” or “Corrective Actions In Progress” as a result of this EA/EBS investigation.

Section 9 presents conclusions regarding suitability to proceed with the real estate transaction. As a result of this EA/EBS investigation, it is recommended that T-Ramp parcel be re-classified as “Category 4: Remedial Action Required and Taken” from its previous classification as “Category 7.”

Section 10 provides recommendations for proceeding with the real estate transaction. This EA/EBS recommends that the T-Ramp parcel be reclassified as “Category 4” and that the AFRC and 911 AW proceed with the planned acquisition of the T-Ramp by lease.

Section 11 describes irreversible and irretrievable commitment of resources, which are related to the use of nonrenewable resources and the effects that the uses of these resources have on future generations. As no change in fuel use is anticipated as the total number of C-130H aircraft and other vehicles used on T-Ramp will remain unchanged, there will be a negligible impact on irreversible and irretrievable resource commitments.

Section 12 provides the following conclusions and recommendations:

- The “EBS Phase II Investigation” (see Appendix I) determined that subsurface petroleum constituent concentrations at the T-Ramp did not exceed the non-residential PADEP Statewide Health Standards for soil or the non-residential, non-use aquifer PADEP Statewide Health Standards for groundwater. This confirms that all remedial actions necessary to protect human health and the environment have been taken due to the historic release and migration of hazardous substances or petroleum products that occurred (i.e., Jet A fuel) at the adjacent Fuel Distribution System area. No other sources of contamination were identified during the EBS Phase II that impacted the T-Ramp area.
- Based on the analysis of the EA/EBS and after careful review of the potential impacts, it was concluded that implementation of the proposed action at Pittsburgh IAP ARS would not result in significant impacts on the quality of the human or natural environment. Therefore, a Finding of No Significant Impact (FONSI) is warranted and an Environmental Impact Statement is not required for the proposed action.
- The proposed action and no action alternative are not located within or would impact wetland areas. Therefore, a Finding of No Practicable Alternative (FONPA) to avoid wetland impacts is not required for the proposed action.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

[This page intentionally left blank]

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

1. INTRODUCTION

A Memorandum of Agreement (MOA) No. 032076 between the Allegheny County Airport Authority (ACAA) and the 911th Airlift Wing (911 AW) has existed since 1993 for the use by the 911 AW of the T-Ramp property, which is approximately 26 acres (identified as “21.7 acres more or less” in the original MOA) and is located adjacent to and north of the current 911 AW apron at the Pittsburgh International Airport in Moon Township, Pennsylvania. The primary purpose of the MOA was to provide space for the 911 AW to relocate C-130 aircraft for parking purposes during construction activity on the primary aircraft apron. The property also provides additional apron space for the 911 AW for visiting military aircraft, including Air Force One and supporting aircraft. Further, this additional space has proven greatly beneficial for space assistance during periods of construction on the 911 AW, including its current apron renovation project. This MOA expired on December 31, 1995, but was temporarily extended several times, most recently expiring on December 31, 2012.

Various areas of the T-Ramp pavement and joint sealant have been determined to be unsafe for aircraft operation by ACAA officials. ACAA has no plans to repair those portions of the MOA property which have been determined to be unsafe for aircraft operations. An extension to the MOA was considered by the AFRC but was disapproved, since this document did not contain sufficient binding language identifying levels of responsibilities, property restoration, and liability considerations that would otherwise be addressed in a lease agreement.

The 911 AW is pursuing the acquisition by lease of the T-Ramp property owned by the ACAA. Prior to a lease agreement, this property must undergo an **Environmental Assessment (EA)** and a **Phase II Environmental Baseline Survey (EBS)** to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property.

A Phase I EBS has already been completed on the T-Ramp property by the 911AW; document titled *Environmental Baseline Survey Report, Additional Acreage from Allegheny County*, dated 5 July 1996 (see Appendix A, Reference no. 1). This work included an update of the Phase I EBS from 1996 to the present and a Phase II EBS, which adds soil and groundwater sampling and analysis. The previous Phase I EBS documentation described the recognized environmental conditions (REC) of this T-Ramp property as “Category 7¹,” requiring further evaluation before making a recommendation to proceed with the transaction. A REC is defined as the presence or likely presence of any hazardous substances or petroleum products on property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. REC includes hazardous

¹ “Category 7” is defined by Air Force Instruction (AFI) 32-7066 as “Further evaluation required. If the existence of contamination or potential for a release of hazardous substances into the environment or structures is indicated, but not well characterized then further evaluation is required. Property which is not well characterized includes Air Force controlled property which has not yet been further characterized pursuant to the Installation Restoration Program (IRP). Conduct further evaluation before making a recommendation on whether to proceed with the transaction. Conduct Phase II of an EBS.”

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

substances and petroleum products even under conditions in compliance with laws. REC does not include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be subject of an enforcement action if brought to the attention of appropriate governmental agencies.

1.1 Purpose of the Document

Purpose of the EA/EBS: The overall purpose is to prepare a single document that meets the U.S. Air Force's content and legal sufficiency requirements for both an Environmental Assessment (EA) and an Environmental Baseline Survey (EBS) for this proposed action. Specifically, this document shall meet the current Air Force guidelines for Environmental Assessments and Environmental Baseline Surveys (see 32 CFR 989 – *Environmental Impact Analysis Process (EIAP)*, and AFI 32-7066 *Environmental Baseline Surveys In Real Estate Transactions*). This EA/EBS will:

- Analyze the environmental effects of the proposed action and alternatives as required by the National Environmental Policy Act (NEPA).
- Document the nature, magnitude, and extent of any environmental contamination of or interests in real property considered for acquisition, out-grant or disposal.
- Identify potential environmental contamination liabilities associated with a real estate transaction and determine possible effects of contamination on property valuation.
- Serve as the basis for notice of environmental condition when required under Section 120[h][1] of the *Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)* as amended (42 U.S.C. 9620[h][1]) or any applicable state or local real property disclosure requirements.
- Determine if a *Finding of No Significant Impact (FONSI)* and a *Finding of No Practicable Alternative (FONPA)* is appropriate for the proposed action.

1.2 Purpose and Need for the Proposed Action

The purpose of the proposed action is for the 911th Airlift Wing (911 AW), Pittsburgh International Airport Air Reserve Station (Pittsburgh IAP ARS), Coraopolis, Pennsylvania to acquire by lease the T-Ramp property from the Allegheny County Airport Authority (ACAA). This property is approximately 26 acres and located adjacent to and north of the current 911 AW apron. See **Figure 3** (Appendix E) for a site plan of the proposed lease property. Alternatives to the proposed action are described in Section 3.

The need for the proposed action is described as follows. The T-Ramp property is approximately 26 acres located adjacent to and north of the current 911 AW apron. Prior to 1973, this property was primarily undeveloped land that served as the approach to former runway 23 at the former Greater Pittsburgh International

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Airport. In the late 1970s and early 1980s, runway 23 was decommissioned and this area was filled and paved as part of the construction of the extension to an existing commuter aircraft apron and parking area. The use of this parcel as a commuter aircraft parking area has essentially remained unchanged since completion of construction around 1985-86.

The 911 AW has utilized this property since 1993 under a Memorandum of Agreement (MOA, see Appendix A, Reference no. 42) with the ACAA. This property provides space for the 911 AW to relocate C-130 aircraft for parking purposes during construction activity on the 911 AW aircraft apron. The property also provides additional apron space for the 911 AW for visiting military aircraft, including Air Force One and supporting aircraft. Further, this additional space has proven greatly beneficial for space assistance during periods of construction on the 911 AW, including its current apron renovation project. AFRC and 911 AW operations require the continued use of this parcel for this intended use.

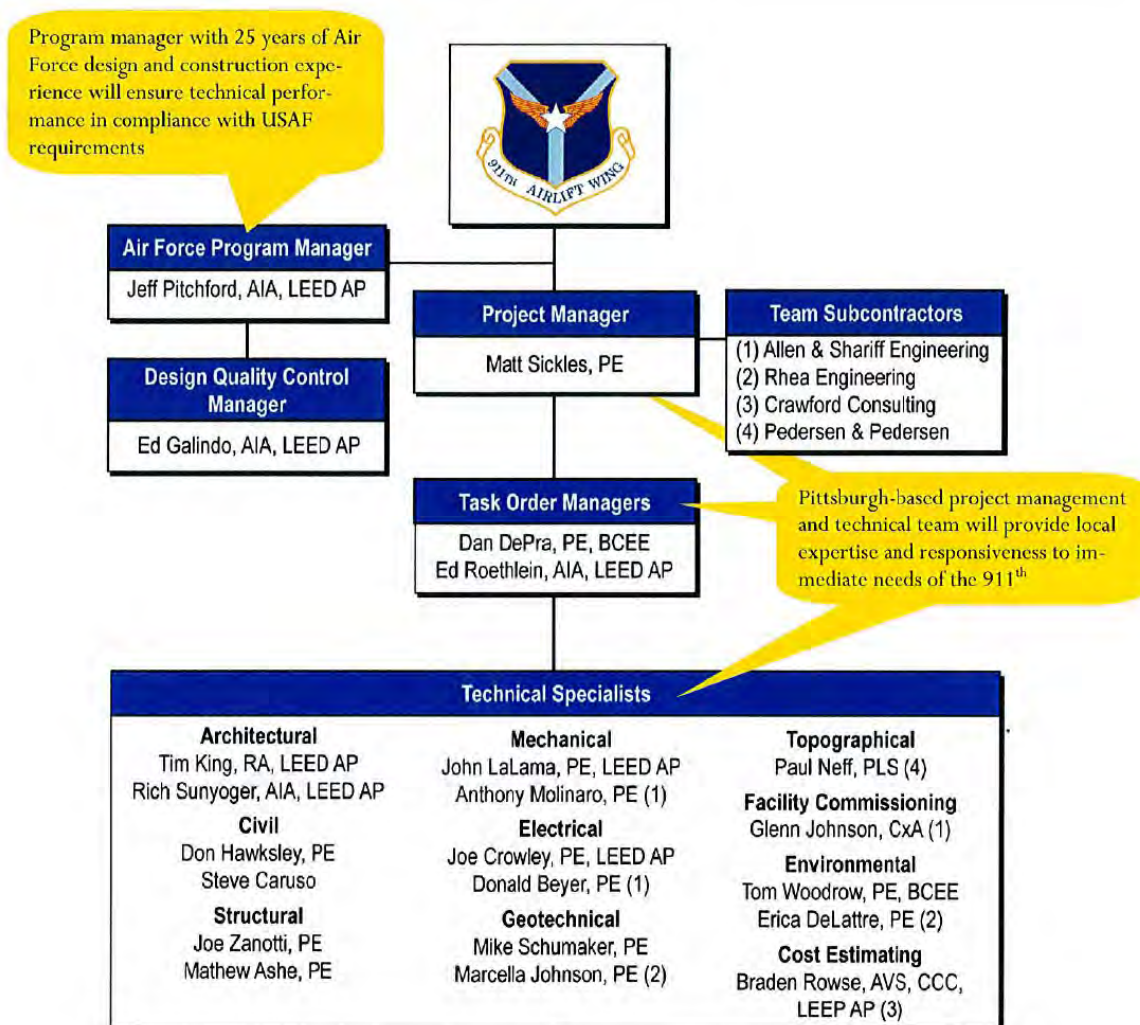
1.3 Organization of the Environmental Assessment and Environmental Baseline Survey

The chart on the following page illustrates the organization for developing the EA/EBS. Mr. Dan DePra (CDM Smith) is the Task Order Manager for this EA/EBS and primary contact with the 911 AW. The following personnel and subconsultants have worked on this Task Order (CDM Smith Team):

- **Jeff Pitchford (CDM Federal Services Corporation)** – Air Force Program Manager and Senior Technical Review
- **Matt Sickles (CDM Smith Inc.)** – Project Manager and Senior Technical Review
- **Marcella Johnson (Rhea Engineering & Consultants, Inc.)** – President and Senior Technical Review
- **Erica DeLattre (Rhea Engineering & Consultants, Inc.)** – development of EA/EBS
- **Jason McCabe (Rhea Engineering & Consultants, Inc.)** – development of EA/EBS and sampling oversight
- **Geo-Environmental Drilling Company, Inc.** – drilling and sampling services
- **Pace Analytical Pittsburgh Laboratory** – analytical services for soil and groundwater
- **I.C.E. Service Group, Inc.** – investigation derived waste disposal
- **Pedersen & Pedersen, Inc.** – surveying
- **Environmental Data Resources, Inc.** – environmental records review

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Organization of the EA/EBS



2. SURVEY METHODOLOGY

2.1 Approach and Rationale

2.1.1 Description of Documents Reviewed

Documents reviewed for the preparation of the EA/EBS are listed in Appendix A.

In addition to the “Environmental Baseline Survey Report for additional Acreage from Allegheny County” developed by the 911 AW for the T-Ramp property in 1996 (see Appendix A, Reference no. 1), the most relevant documents reviewed were related to the former Greater Pittsburgh International Airport Old Terminal property that served as the airport passenger terminal from 1952 to 1992, when the new Midfield Terminal opened. The Old Terminal remained vacant until it was demolished in 1999. Specifically, documents were reviewed that related to the Old Terminal Fuel Distribution System (see Appendix A, Reference nos. 2, 5, 6, 7, 10, 11, 14, 16, and 17) and the Old Terminal Fuel Farm Area (see Appendix A, Reference nos. 3, 4, 12, 13, 15, 18, and 19).

The most relevant documents reviewed were the “Final Report” for the Pittsburgh International Airport, Old Terminal, Fuel Distribution Area, which were prepared for the Allegheny County Airport Authority by CDM on January 6, 2004 (see Appendix A, Reference nos. 5, 6 and 7). The Executive Summary (see Appendix A, Reference no. 5). is provided as follows:

“Between the 1950s and 1992, the Fuel Distribution System at the former Greater Pittsburgh International Airport Old Terminal was in operation in Moon Township, Pennsylvania. Jet A fuel was conveyed from the adjacent Fuel Farm through underground piping around the airplane docks of the former Old Terminal where airplane refueling took place. Jet A fuel was released into the environment through leaks and spills during this time period. Camp Dresser & McKee (CDM) was retained by the Allegheny County Department of Aviation, now known as the Allegheny County Airport Authority (ACAA) to decommission and investigate the fueling system.

Site characterization activities occurred between 1993 and 2000. Site characterization activities included soil boring and sampling/analysis, monitoring well installation and groundwater sampling/analysis, and hydrogeological investigations. Investigated media include soil, groundwater, and stormwater.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Soil and groundwater standards for the Fuel Distribution System at the former Greater Pittsburgh International Airport Old Terminal were selected from the PADEP and Recycling Program (Act 2). Site-Specific standards were developed for six soil "sites" using the risk assessment that was included in the 1997 Cleanup Plan for the Fuel Distribution System. Statewide health, non-use aquifer standards were approved by PADEP on December 30, 1999 and were applied to groundwater.

Soil remediation was conducted at the six "sites" along the Fuel Distribution System in the summer of 1997. The selected remediation alternative was excavation of impacted soil and proper off-site disposal. CDM provided direction and oversight of the soil remediation activities. A total of 2,305 tons (approximately 1,350 cubic yards) of soil was excavated and transported to the BFI Imperial landfill for disposal.

The post-excavation soil sampling and remediation was completed at the six "sites" as specified in the PADEP-approved January 1997 Cleanup Plan. A total of 34 samples were collected to demonstrate attainment with the Site-Specific soil standards. The constituents analyzed include petroleum hydrocarbons-diesel range organics (PHC-DRO), benzene, toluene, ethylbenzene, xylenes, cumene, trimethylbenzenes, and butylbenzenes. None of the 34 soil samples obtained from the six soil remediation areas exceeded the cleanup levels for their respective area.

Analytical data revealed that demonstration of attainment for soil has been achieved at the six remediation "sites." Therefore, CDM recommends no further action for soil and requests a release of liability for the six soil "sites" for the ACAA.

Groundwater samples from the onsite monitoring wells had petroleum constituent concentrations below the PADEP Statewide health, non-use aquifer, non-residential groundwater standards. A contaminant plume does not exist in groundwater encountered in bedrock aquifers or perched water. Therefore, CDM recommends no further action for groundwater.

Analytical data revealed that stormwater samples had organic petroleum constituent concentrations below the applicable PADEP groundwater standards; therefore, petroleum contaminants did not impact perched water or surface water bodies."

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

It is important to clarify that as part of the environmental investigation for this site, CDM installed and sampled 16 groundwater monitoring wells and collected over 1,100 soil samples from the four dock areas in the vicinity of the 217 fuel distribution system service pits as part of the *1997 Cleanup Plan for the Fuel Distribution System* (dated January 1997 and provided as Appendix A, Reference no. 2).

The analytical results indicated that isolated pockets of petroleum hydrocarbon compounds indicative of Jet A fuel existed at concentrations greater than the Act 2 Statewide Human Health Standards around individual service pit structures and along segments of the fuel distribution pipeline backfill.

Based on the findings of the soil and groundwater investigations, the enactment of the PA Act 2 regulations, and the intended future use of the property, it was necessary for CDM to conduct a risk assessment to determine the potential impact to human health through various exposure pathways. This risk assessment is included in the *1997 Cleanup Plan for the Fuel Distribution System* (see Appendix A, Reference no. 2).

As a result of this risk-assessment, CDM developed and obtained PADEP approval for the following Site-Specific soil standards:

- For areas within 50 feet of future buildings:
 - 14,000 mg/kg petroleum hydrocarbons-diesel range organics (PHC-DRO);
 - 1.8 mg/kg benzene;
 - 6,900 mg/kg toluene;
 - 40,200 mg/kg ethylbenzene;
 - 760 mg/kg cumene;
 - 1,760 mg/kg trimethylbenzenes; and
 - 3,800 mg/kg butylbenzenes.
- For areas greater than 50 feet from future buildings: 19,000 mg/kg PHC-DRO.

The six soil remediation sites referenced in the Final Report were the only areas identified where soils exceeded these PADEP-approved Site-Specific standards. As previously stated, remediation of these six sites included excavation and proper off-site disposal of soils that exceeded the Site-Specific cleanup standards.

On January 7, 2004, ACAA received Act 2 liability protection from PADEP, which required a deed notice since this project attained a Site Specific Standard for soil. This Deed Notice is provided as Appendix L.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

As illustrated on the Site Plan, **Figure 3** (Appendix E), the former location of the Old Terminal Southeast Dock was previously located within the general area of the proposed western lease line boundary of the T-Ramp property.

According to **Figure 4** (Appendix E), the closest of the six Soil Remediation Areas to the T-Ramp property, was Area No. 2, which may be near or within the proposed western lease line boundary of the T-Ramp property. The other five Soil Remediation Areas appear to be west and northwest of the T-Ramp property as described below:

- **Area No. 1:** located north of the former Main Terminal East Dock and approximately 1,000 feet west of the T-Ramp property.
- **Areas No. 3 and 4:** located south of the former Main Terminal Southeast Dock and approximately 500 and 600 feet west of the T-Ramp property, respectively.
- **Area No. 5 and 6:** located west of the former Main Terminal West Dock and approximately 2,300 feet west of the T-Ramp property.

The strategy for assigning sampling locations as provided on the Sampling Plan Location Map, **Figure 2** (Appendix E), and described in Section 2.1.4 was derived primarily from these documents. Specifically, additional soil borings were located in the general vicinity of the former Old Terminal East and Southeast Docks due to historic contamination in these areas.

As the direction of groundwater flow is generally from southwest to northeast in this area, the references related to downstream areas east of the T-Ramp parcel (see Appendix A, Reference nos. 20, 21, 22, 23, 24, 25, 26, 29, 30, 32, 33, 34, and 35) were not considered to have the potential to significantly impact the subject property.

2.1.2 Property Inspections

The CDM Smith Team conducted site visits to the 911 AW on July 17, 2011, Aug 11, 2011, and September 23, 2011. During these site visits, 911 AW staff escorted the CDM Smith Team by vehicle to the T-Ramp property. During these visits, the 911 AW was using the T-Ramp property as described in Section 1. The majority of the T-Ramp property is covered with concrete pavement, which as described in Section 1, portions of the pavement and joint sealant of the T-Ramp have been determined to be unsafe for aircraft operation by ACAA officials. Otherwise, no obvious recognized environmental conditions were identified.

More detailed inspections of the property were conducted during soil and groundwater sampling as identified in Section 2.1.4.

2.1.3 Personal Interviews

The following personal interviews were conducted during this EA/EBS:

911 AW Staff: The kickoff meeting for this project was conducted on October 26, 2011 with the CDM Smith Team (DePra and DeLattre) as well as many 911 AW and Allegheny County Airport Authority staff present. Logistics of the project were discussed and the former EBS for this project was provided (see Appendix A, Reference no. 1).

Allegheny County Airport Authority: On November 3, 2011, the CDM Smith Team (Sickles, DePra, DeLattre, McCabe) met with Mr. Richard Belotti and Mr. Kevin Gurchak of the ACAA Planning and Environmental Department. ACAA provided several reference documents for review (see Appendix A, Reference nos. 1, 2, 3, 4, 5, 6, 7, 8, and 9).

CDM Smith Archives: As CDM conducted the environmental investigations and remediation design for the Old Terminal Fuel Farm and Fuel Distribution Systems, several relevant documents were retrieved from archived storage for review (see Appendix A, Reference nos. 12, 13, 14, 15, 16, 17, 18, and 19). In addition, Mr. Matt Sickles also served as the former Project Manager for these ACAA projects and serves on the CDM Smith Team as senior technical review for this T-Ramp EA/EBS project.

PADEP File Review: The CDM Smith Team (DePra, DeLattre, McCabe) conducted a file review at the PADEP Southwest Regional Office for documents related to the T-Ramp property and the 911 AW. They retrieved several relevant environmental references (see Appendix A, Reference nos. 20, 21, 22, 23, 24, 25, 26, 29, 30, 31, 32, 33, 34, and 35).

2.1.4 Sampling - EBS Phase II Investigation

The primary objective of the Environmental Baseline Survey (EBS) Phase II Investigation was to identify recognized environmental conditions (RECs) for the T-Ramp property, and to further evaluate the nature and extent of potential environmental contamination to support the environmental impact analysis. Subsurface soil and aquifer sampling has been performed in order to identify and evaluate the following:

- Contaminants or sources of contaminants in soil;
- The presence of groundwater contamination; and
- The type, concentration, and extent of contamination.

All field activities associated with the EBS Phase II Investigation were overseen by the CDM Smith Team. The sampling design and rationale, as further defined in the following sections of this Sampling and Analysis Plan, was developed by the CDM Smith team using the USEPA

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

“Guidance for Performing Site Inspections under CERCLA” (see Appendix A, Reference no. 43) as a reference.

The full EBS Phase II Investigation Report is provided as Appendix I and a summary of the investigation procedures are provided in the following sections. Minor deviations from these procedures are described in Section 3.1.3. of the Phase II EBS (Appendix I).

The analytical results of all samples collected during this EBS Phase II were either non-detect or were below the Pennsylvania (PA) Act 2 standards that were chosen for comparison.

Sampling and Analysis Plan

A total of 27 soil borings including nine groundwater wells were proposed for this EBS Phase II Investigation (with only eight of the nine wells able to be installed due to subsurface conditions). The soil boring and temporary monitoring well locations are identified in **Figure 2** (Appendix E) and the field investigation methods are further defined in the following sections of this Sampling and Analysis Test Plan. As identified in **Figure 2** (Appendix E), borings/groundwater wells are located within the approximate 26-acre T-Ramp property boundary. The soil borings and groundwater well locations provide adequate coverage over the estimated 26-acre site with sample locations determined by reviewing existing documentation from the adjacent property and the T-Ramp property. The field team leader relocated soil boring locations when site conditions warranted following approval from the 911 AW/MSG/CEV, CDM Smith Project Manager, and Rhēa Project Manager. Examples of soil boring relocation scenarios include conditions where refusal is encountered during drilling, adequate sample material is not retrieved, or a subsurface obstacle is encountered. Boring locations were surveyed as discussed in the **Survey** section below.

Soil Sampling Procedures

To complete the Phase II EBS Investigation, CDM Smith subcontracted Geo-Environmental Drilling Company, Inc. (GEO), a PA-Certified Well Driller, to perform soil boring drilling. Prior to drilling activities, GEO coordinated all field activities with the 911 AW, Allegheny County Airport Authority (ACAA), and Airport Operations staff, as well as Pennsylvania One-Call to locate all underground utilities.

Borings identified as “Soil Boring Location” in **Figure 2** (Appendix E), were advanced to a total depth of 25 feet below ground surface (bgs) or until bedrock refusal was reached using a 3.25-inch-diameter hollow stem auger (HSA). Borings identified as “Temporary Well Monitoring Locations” were advanced through the soil using a 4.25-inch diameter HSA. All borings through concrete were cored with a portable thin-wall

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

core drill and 13-inch-diameter diamond-coated, thin-wall bit. Following the coring of concrete, drilling commenced, and soil samples were retrieved via standard penetration testing (SPT), from which split-spoon samples were collected at 2.5-foot intervals, with a portion of the soil interval being placed into a labeled, resealable plastic bag using a clean, stainless steel spoon after donning a clean pair of non-powdered, disposable gloves. These bag-portioned soil samples were sealed and kept (minimum of 20 minutes post-boring) at ambient temperature for field screening with a photoionization detector (PID). The soil sample collected from the depth interval within each boring that corresponds to the highest PID reading was submitted to the laboratory for chemical analysis. In the event that PID readings were all non-detect for a soil boring, the sample was collected at the last 2.5' sampling interval above bedrock refusal or the sampling interval immediately above the groundwater capillary fringe. Soil lithology and PID readings from each soil boring were recorded onto soil boring logs and is included as Appendix I in this EA/EBS.

During the collection of soil samples, special precautions were taken to prevent potential cross contamination. A clean pair of new, non-powdered, disposable gloves was worn each time a different sample is collected, and the gloves were donned immediately prior to sampling. The gloves did not come in contact with the media being sampled and were changed any time during sample collection that their cleanliness was compromised. Soil samples were collected using prepackaged Terracore[®] kits supplied by the laboratory and analyzed for the presence of compounds from the target compound list (TCL) (including PA underground storage tank [UST] jet fuel parameters) volatile organic compounds (VOCs), and total lead. CDM Smith subcontracted Pace Analytical Services, Inc. (Pace), a PA Department of Environmental Protection (PADEP)-certified laboratory, for sample analytical services. The table below identifies the sample container details including the analytical and preparation method, the type of sample containers, the recommended volume/weight of sample needed for proper laboratory analysis, preservation requirements, and the maximum holding time for the targeted analytical group.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Table 1: Proposed Soil Sample Analysis

Matrix	Analytical Group	USEPA Analytical Method	Containers	Sample Volume/ Weight (units)	Preservation Requirements	Maximum Holding Time
Soil	TCL-VOCs	8260B	Terracore [®] Kit (3 VOA Vials)	4-5 grams (g)	Methanol/ Bisulfite	14 days
Soil	Total Lead	6010B	Glass	100 g	4 degrees C	48 Hours

Groundwater Sampling Procedures

GEO, with CDM Smith Team oversight, provided temporary monitoring well installation services for the EBS Phase II investigation. Eight of the 27 soil borings were converted to temporary monitoring wells upon completion of soil sampling activities, in accordance with the PA Well Construction Standards as defined in the PADEP's *Groundwater Monitoring Guidance Manual (December, 2001)*. The temporary wells were installed to a depth of 10 feet beyond the presence of fractured bedrock aquifer or a maximum depth of 75 feet bgs by advancing 4.25-inch diameter HSA through soil, and a four-inch diameter air hammer through bedrock. Temporary monitoring wells were constructed using 50 linear feet of two-inch diameter, Schedule 40 polyvinyl chloride (PVC) 0.010-inch slotted screen, and solid PVC riser to ground surface. A sand pack was installed two feet above the top of the screen, and a bentonite chip (3/8 inch) seal was placed on top of the sand filter pack. The remaining annular space was filled with bentonite chips to the ground surface. The bentonite seal and bentonite filled annular space creates an effective means to prevent downhole contamination prior to and during sampling activities.

Following development of the temporary monitoring well, groundwater samples were collected using low-flow groundwater sampling methodology. Each well was purged immediately before sampling using a low-flow bladder pump and dual-bonded tubing at a rate equal to or less than the groundwater recharge rate. Wells were purged for one hour or until field parameters (dissolved oxygen [DO], temperature, pH, conductivity, oxidation-reduction potential [ORP], and turbidity) and water level are stabilized, whichever occurs first. Field parameters and depth-to-water were measured approximately every five minutes and

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

considered stable once they met the following requirements for three consecutive readings:

- DO [$\pm 3\%$];
- pH [± 0.1 standard units];
- Conductivity [$\pm 10\%$];
- ORP [$\pm 10\%$]; and
- Turbidity <10 nephelometric turbidity units (NTU) [or as low as practicable].

Groundwater samples were collected into laboratory-supplied and labeled 40 milliliter (mL) glass vials and submitted to the laboratory and analyzed for the presence of compounds from the TCL (including PA UST jet fuel parameters) VOCs, dissolved lead, and ethyl dibromide (EDB) as described in Table 2.

Table 2: Proposed Water Sample Analysis

Matrix	Analytical Group	USEPA Analytical Method	Containers	Sample Volume/Weight (units)	Preservation Requirements	Maximum Holding Time
Water	TCL-VOCs	8260B	3 VOA Vials	40 mL	Hydrochloric Acid	14 days
Water	Dissolved Lead	200.7	1 Plastic, 1 Glass	500 mL	HNO ₃	28 days
Water	EDB	8011	3 VOA Vials	40 mL	4 degrees C	14 days

Similar to the soil samples discussed above, special precautions were taken to prevent potential cross contamination during groundwater sampling as well. A clean pair of new, non-powdered, disposable gloves was worn each time a different sample is collected, and the gloves were donned immediately prior to sampling. The gloves did not come in contact with the media being sampled and were changed during sample collection if their cleanliness was compromised.

Temporary monitoring wells were abandoned within 24 to 48 hours from the time the wells are sampled, in accordance with PA well construction standards. GEO abandoned the wells by pulling the well casing and backfilling the resulting borehole/casing with a cement/bentonite grout to within the bottom of the concrete apron. For borings that are advanced through the concrete apron, GEO finished each location flush to grade

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

with concrete mix (per ACAA standard). For borings advanced through grassy, non-paved areas, the borings were grouted to within six inches of the surface and backfilled with topsoil.

Equipment Decontamination

Non-disposable sampling equipment was decontaminated prior to use and between sampling locations according to the following procedures.

All equipment used for sampling activities arrived on site in clean condition. With the exception of certified laboratory-cleaned equipment, all sampling, testing, or measuring equipment that came in contact with potentially sampled medium was decontaminated prior to use, unless it arrived prepackaged by a manufacturer. Equipment was also decontaminated between sampling locations. If disposable sampling equipment (clean prepackaged materials, such as Terracore[®] soil samplers) was used, it was not decontaminated before use and was disposed of properly after one use. Disposable equipment was not used at more than one sampling location.

Prior to initiating field activities, the decontamination area was established, preferably upwind from the sampling area(s). For decontamination of hand-held sampling equipment, plastic sheeting was spread on the ground and the decontamination tubs and/or buckets and rinse bottles were placed, in order, on top of the plastic.

The following steps for decontamination were applied to all equipment coming into contact with the sampling medium (Note: solvents and/or nitric acid were not used to decontaminate any electrical, mechanical, or electronic instrumentation, unless specified by the manufacturer):

1. Physically remove as much of the visible material as possible from the sampling equipment after use and before submersing it in decontamination fluids.
2. Scrub with a nonphosphate detergent (e.g., Liquinox)/potable water solution.
3. Perform a potable water rinse, followed by a deionized (DI) water rinse.
4. Allow equipment to air-dry on a piece of foil, as conditions allow.

If decontaminated equipment was not used immediately, it was wrapped in foil for storage. Decontamination solvents were collected in a separate container from any water/detergent solutions and properly disposed.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Quality Assurance/Quality Control

The following quality assurance/quality control (QA/QC) program was established to allow for the assessment of data quality. QA/QC samples collected in the field included duplicate, matrix spike/matrix spike duplicate (MS/MSD), field blank, and equipment blank samples collected according to the following frequency:

- Duplicates - one for every 10 samples (per media) – three soil and one groundwater
- MS/MSD - one for every 20 samples (per media) – one soil and one groundwater
- Field Blanks - one per event (per media) one soil and one groundwater
- Equipment Blanks - one per week (per media)

Temperature and trip blanks were provided by the laboratory and included with each required cooler submitted for laboratory analysis.

Additional QA/QC measures taken by CDM Smith team field staff included the proper calibration of field equipment. **Table 3** outlines the field parameters monitored during the length of the field investigation, along with the frequency, calibration acceptance criteria, and person responsible for maintaining equipment calibration and maintenance.

Table 3: Calibration of Field Equipment

Field Equipment	Activity	Frequency	Acceptance Criteria	Responsible Person
MiniRAE 2000 PID ¹	Calibrate	Daily	100 parts per million (ppm) Isobutylene	Field Staff
pH ²	Calibrate	Daily	2 point: 4.00, 7.00	Field Staff
Conductivity ²	Calibrate	Daily	± 10%	Field Staff
ORP ²	Calibrate	Every 2 months	Temperature Solution - YSI 3682 Zobell Chart	Field Staff
Temperature ²	Calibrate	Daily	NA	Field Staff
Turbidity Meter ²	Calibrate	Daily	1 NTU, 10 NTU	Field Staff

¹ Daily field calibration procedures followed manufacturer's instructions and recommendations.

² Calibration standards per USEPA, Region 4, Science and Ecosystem Support Division Field Branches Quality System and Technical Procedures (August 7, 2009).

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

QA/QC procedures that were followed are further discussed in the **Laboratory Management of Samples** section below.

Sample Handling

Soil and groundwater samples were collected by the CDM Smith Team field staff under the direction and supervision of the field team leader. Sample containers were placed into proper shipping containers immediately following collection. Shipping containers were insulated coolers packed with wet ice to maintain a temperature of approximately four degrees Celsius during storage on site and shipping. Dry ice, blue ice, or chemical cooling packs were not used. Packing material was placed between containers to avoid breakage. The chain of custody (COC) was placed in a sealed plastic bag within one of the shipping containers.

Samples were typically delivered daily to the laboratory via a Pace-supplied courier, as coordinated by Pace and the field team leader.

Sample Labels

All sample containers were labeled in advance of sampling activities. The sample label included a unique sample identification number. The sample label also included the date and time the sample was collected, the name (or initials) of the sampler, the sample location, and the required analysis. The label also identified the container preservative, if any, as completed by the laboratory.

The sample identification number was provided in the following format:

Project/Site Name – Boring Number - Matrix (Groundwater [GW]
or solid/soil [S]) – Top of Sample Interval (if applicable) –
Bottom of Sample Interval (if applicable)

For example, a soil sample collected from boring F1 from the 10-
to12-foot depth interval had the following identification number:
TRamp-F1-S-10-12

Sample Custody and Handling

A single COC record was completed daily and included each shipping container of samples. The COC record was typically completed on a carbon-copy form provided by the laboratory. The record, at a minimum, contained the following:

- Site name;
- Full name of sampler;
- Sample identification number for each sample;
- Date and time of collection for each sample;

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

- Sample matrix (liquid or solid);
- Number of containers for each sample;
- Required analyses for each sample;
- Preservation for each sample, if required;
- Notation whether samples shipped on ice or not;
- Notation if sample was expected to be highly contaminated;
- Signature of person(s) involved in chain of possession; and
- Transfer date(s) and time(s) in chain of possession.

The preparer of the COC form (i.e., sampler) signed, dated, and recorded the time and retained a copy of the form for their records. They then attached the form to daily field logs for the project. Prior to acquiring the samples, the Pace courier also signed, dated, and recorded the time at which Pace picked up the container from the sampler. The COC form was placed in a sealed plastic bag inside the shipping container, and the shipping container was secured with strapping tape and a custody seal. Three signatures were provided on the final COC; one signature by the preparer of the form, one signature from the courier, and one signature by the sample custodian assigned by the laboratory. The sample custodian assigned by the laboratory opened the shipping container and denoted on the COC form, any breaks to the custody seal of the shipping container and/or damage to the shipping container or sample containers.

Laboratory Management of Samples

All project-related activities performed by Pace followed stringent guidelines, as outlined in their Quality Assurance Manual, a copy of which can be provided upon request. This document defines the Pace Quality System and QA/QC protocols that meet or exceed all federal, state, and local laws in addition to ACAA requirements.

The laboratory sample custodian assigned a laboratory number to each sample (to be denoted on the COC), logged in the sample in the laboratory logbook, and stored the sample in a secured storage room or cabinet until assigned to an analyst for analysis. The sample was stored at conditions (i.e., four degrees Celsius if appropriate) and for maximum holding times identified by *40 Code of Federal Regulations [CFR] 136*, as appropriate (USEPA Guidelines Establishing Test Procedures for the Analysis of Pollutants).

The custodian was required to immediately contact the person completing the COC if the seal on the shipping container was broken, any discrepancies existed between the COC and sample labels, or any sample container was damaged. Problems noted by the sample custodian were to

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

be resolved with the sampler before the sample is assigned for analysis. None of these conditions existed for this project.

Once the sample was received by the analyst, that person is responsible for its care and custody, and that person should be prepared to testify that the sample was in his/her possession or secured in the laboratory at all times until the analysis was performed.

Sample Disposal

The laboratory was responsible for determining whether each individual sample is “hazardous” or “non-hazardous” based upon guidelines established in *40 CFR 260*, and will dispose of all samples in accordance with USEPA requirements. As all samples were determined to be non-hazardous waste by the laboratory, the sample and sample container was disposed of as a solid waste at a facility permitted in accordance with *40 CFR 257*.

Surveying

Proposed boring locations were not surveyed prior to drilling in the event that field conditions warrant their movement. Following drilling and sampling activities, the boring locations were located by Pedersen & Pedersen, a PA-licensed professional land surveyor. The surveyor provided northing and easting coordinates, the elevation of each sampling location, and top of well casing for temporary groundwater wells.

Investigation Derived Wastes

Investigation-derived wastes (IDWs) consist of soil (drill cuttings and excess soil sample material), purge water, decontamination fluids, and personal protective equipment. Disposal was performed in accordance with *40 CFR 240-282*, *AFI 32-7042*, *AFPAM 32-7043*, and *PA Code, Title 25, Chapters 260-270a*, as defined in the Scope of Work (SOW). IDW soil and fluids were placed in properly containerized, marked, and labeled drums, and stored at a facility-supplied staging area pending the results of soil and groundwater sample analyses. Following characterization of the drummed IDW, CDM Smith subcontracted I.C.E. Service Group, Inc. (ICE) to properly dispose of the drums. All shipping papers, including non-hazardous waste manifests and bills of lading were coordinated by CDM Smith with I.C.E. Services Group and signed by the 911 AW. CDM Smith provided a Profile Sheet for the IDW, which was subsequently disposed off site. Personal protective equipment and other wastes (i.e., gloves, disposable sampling equipment) were decontaminated, bagged, and properly disposed offsite.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Data Management/Validation

Pace provided Level III data packages and Electronic Data Deliverables (EDD) to the CDM Smith team within 28 days of the completion of the field work. General data validation procedures as outlined in the *National Functional Guidelines for Organic Data Review and Inorganic Analyses* (USEPA, 2008 and 2010) were used during the validation process. In addition, USEPA Region 3 Modifications to *National Functional Guidelines for Organic Data Review and Inorganic Analyses* (USEPA, 1993 and 1994) were used during the data validation process. Data qualifiers and data validation codes were added to EDD files, as appropriate. The CDM Smith team checked the EDDs for completeness and accuracy and compared the EDD to the hard copy version for the reports.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

[This page intentionally left blank]

3. PROPOSED ACTION AND ALTERNATIVES

3.1 Proposed Action

The proposed action is for the 911 AW to acquire by lease the T-Ramp property from the Allegheny County Airport Authority to satisfy the purpose and need as defined in Section 1. This approximately 26 acre property is a secured and predominantly paved area that is located adjacent to and north of the current 911 AW apron and leased area. It would provide the 911 AW with a contiguous, easily accessible and secure leased area required for 911 AW operations.

The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA (see Appendix A, Reference no. 42), which expired on December 31, 1995, but was temporarily extended several times, most recently expiring on December 31, 2012.

With eight designated aircraft parking spots large enough for C-130H aircraft and their associated taxi routes, the T-Ramp property has proven to be greatly beneficial for space assistance for relocating and parking military aircraft during periods of construction on the 911 AW, including its current primary apron renovation project. This property also provides additional apron space for the 911 AW's visiting military aircraft, including Air Force One and supporting aircraft. AFRC and 911 AW operations require the continued use of this parcel for this intended use.

3.2 Alternatives

3.2.1 Alternatives

Alternative 1 – Continue to extend MOA annually: The 911 AW could continue to extend the MOA with ACAA for the use of the T-Ramp property annually. However, this is not recommended for the following reasons:

- The current MOA does not contain sufficient binding language that identifies levels of responsibilities, property restoration, and liability considerations that would otherwise be addressed in a lease agreement. The AFRC previously considered and disapproved an update and extension to this MOA for these reasons. Temporary extensions of the existing MOA have therefore been executed annually for continued use of this property by the 911 AW.
- Airfield pavements must provide safe operating areas for the ground movement and parking of aircraft. Portions of the pavement and joint sealant of the T-Ramp have been determined to be unsafe for aircraft operation by ACAA officials and ACAA has no plans to repair those portions of the T-Ramp property. While the temporary MOA addresses responsibilities for repairing damages to the T-Ramp property caused by the 911 AW, it does not specifically identify responsibilities for

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

preventive maintenance and repair of pavement due to routine wear and aging. A lease agreement, rather than an MOA, would address these issues.

- The temporary MOA is typically year-to-year, which does not provide the 911 AW with any assurance that after one year, ACAA could decide to not renew the MOA and reclaim this space for development. A lease agreement would provide this assurance.

Alternative 2 – Lease less than the approximately 26 acres of space at the T-Ramp: The 911 AW could reduce the area proposed to lease (from approximately 26 acres). However, this is not recommended for the following reason: the need has been defined for the 911 AW to park eight C-130H aircraft in this area. The space must be large enough to accommodate the associated taxi routes for eight C-130H aircraft to access taxiway N2, as shown on **Figure 3** (Appendix E). Reducing the size of the available space in this area would likely not be able to accommodate these aircraft according to the defined need.

3.2.2 No-Action Alternative

The “no action” alternative is not to acquire the T-ramp property by lease. Consequences of selecting the “no-action” alternative are:

- By taking no action, the 911 AW would lose the mission critical capability to use this property for the defined purpose and need.
- As PIT airport development advances in adjacent areas such as the construction of the Heinz Hangar and associated taxiway to the northeast, additional ACAA development could be expanded into the T-Ramp area if it is not under sole use and lease by the 911 AW. This would reduce the space available for current 911 AW use, restrict flexibility for using their total apron space, and restrict any potential future development or use by the 911 AW in this T-Ramp area.

3.2.3 Alternatives Considered But Eliminated From Further Consideration

Alternative 3 – Consider other contiguous locations that satisfy purpose and need of this action: The T-Ramp property is the only available, contiguous property to the north of the 911 AW leased area that provides the appropriate security and access efficiency for parking eight C-130H aircraft.

- Immediately to the west of the base are taxiway N and cross-wind runway 14/32. Further west are the airport's new passenger terminal and the balance of the airport's runways and taxiways. The presence of these facilities effectively precludes the base from constructing any facilities west of this point.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

- To the south of the base are two parallel runways, 10C/28C and 10R/28L. South of the runways is the Pennsylvania Air National Guard's base. The location of the parallel runways and their corresponding protection zones also limits the base's ability to expand in a southerly direction.
- The eastern boundary of the base is established by the presence of Interstate 376 Business (formerly Business Route 60), a limited access highway. Land use to the east of Interstate 376 Business consists of the Cherrington Corporate Center, a commercial and office complex, a par 3 golf course and low-density residential property, which limits the base's ability to expand in an easterly direction.

Alternative 4 – Consider other non-contiguous locations that satisfy purpose and need of this action: No non-contiguous locations were available on ACAA property that provided the appropriate level of security, accessibility, proximity, convenience and space required to meet the purpose and need. For example, the 911 AW could have investigated the Northfield Development, or other sites available on airport property, but it would be impractical and costly to develop adequate storage space with the required amenities and security on the other side of the airfield and taxi back to the 911 AW for loading, refueling, maintenance, parking and any other mission critical operations.

3.3 Boundaries of the Property/Survey Area

3.3.1 Legal Description of Property to be Transferred

A legal description of the property to be transferred is not currently available from the Allegheny County Airport Authority.

3.3.2 Maps

The following Figures are provided in Appendix E.

Figure 1 is the site location map.

Figure 2 is the EA/EBS Sampling Plan location map.

Figure 3 is the site plan of the proposed T-Ramp property in relation to the 911 AW lease boundary and former Old Terminal Fuel Distribution System. This includes approximate locations of subsurface utilities.

Figure 4 is the Old Terminal Fuel Distribution System Remediation Site Plan.

Figure 5 is the Pittsburgh IAP ARS – IRP sites (from IRP).

Figure 6 is the Stormwater System and Tanks.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Figure 7 is the Allegheny County Airport Authority,
Environmental and Infrastructure Mapping – Streams and
Wetlands (prepared by Michael Baker Jr., Inc. for ACAA).

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

4. AFFECTED ENVIRONMENT

In this section, the environment of the areas to be affected by the proposed action and no action alternative is described.

4.1 History and Current Use

4.1.1 History

As stated in Section 1.2, prior to 1973, the T-Ramp property was primarily undeveloped land that served as the approach to former runway 23 at the former GPIA. A more detailed history of the T-Ramp property is summarized within Section 3.1 of the July 1996 Environmental Baseline Survey (see Appendix A, Reference no. 1) as stated below:

“The former GPIA lies within the commercial district of Moon Township. The site is located to the south of Business Route 60 between the Coraopolis/Moon Interchange and Beer School Road.

The following is a summary of major construction/operations activity at the GPIA:

- 1946 Construction of an army infield
- 1952 Main terminal opened as a commercial airport
- 1952 Fuel Farm and Jet Fuel Distribution System Operational
- 1959 East Dock was added to the Main Terminal building
- 1969 International Arrivals added
- 1971 West Dock and the rotundas at the end of the South and East Dock were constructed
- 1979 Construction of the Southeast Dock
- 1980 Construction of Deicing Pad for USAIR
- 1992 GPIA Terminal Closed”

It is important to note that Beers School Road has since been renamed to University Boulevard and Business Route 60 has since been renamed to Interstate 376 Business.

4.1.2 Land Use

4.1.2.1 Current Land Use

As stated in Section 1.2, the 911 AW has been using the T-Ramp property since 1993 under the conditions of an MOA with the ACAA (see Appendix A, Reference no. 42) to provide space for the 911 AW to relocate C-130 aircraft for parking purposes during construction activity on the primary aircraft apron. The T-Ramp also provides additional apron space for the 911 AW’s visiting dignitaries and military aircraft, including Air Force One and supporting aircraft.

4.1.2.2 Historic Land Use

Prior to World War II, most of Moon Township, Pennsylvania was agricultural farmland. It is likely that the future GPIA was part of the number of small farms purchased in early 1920s by Mr. John A. Bell of Carnegie to establish a major commercial dairy farm which ultimately consisted of 1,900 acres of land. Although the date is not exactly known, the “Bell Farm” was later bought by E.E. Rieck and C.F. Nettrour, owners of Rieck’s Dairy, who continued the property’s use as a cattle farm.

In 1942, the Works Progress Administration (WPA), in support for the need of a military airport to defend the industrial wealth of the Pittsburgh area, bought the old “Bell Farm” and began construction of the runways. The airport likely fell into the control of Allegheny County in late 1943 when the US Congress terminated the WPA as unemployment was virtually nonexistent with the U.S.’s entry into World War II. In 1946, ground was broken on the Greater Pittsburgh Airport public passenger terminal, which was finished in 1952 and would later be renamed Greater Pittsburgh International Airport in 1972. From 1970 to 1972, construction continued at the airport in support of the International Wing including the addition of rotundas to the end of each dock in order to expand the number of gates at the terminal. In 1980, the South East Dock was opened immediately adjacent to the western boundary of the T-Ramp, creating even more aircraft gates. Unfortunately, simply adding docks to the existing terminal could not keep up with the air travel needs and in 1987, work commenced on the new terminal which opened on October 1, 1992. In 1993, the 911 AW began leasing the T-Ramp under an MOA (see Appendix A, Reference no. 42). From the 1920s to the present, there is no evidence or documentation supporting the presence of buildings located on the current day T-Ramp property. The old terminal and the docks adjacent to the T-Ramp were demolished in 1999.

4.1.3 Chain of Title

A typical chain of title only traces the previous 50 years of land ownership. Consequently, performing one on the T-Ramp would likely add little feedback or useful information. Allegheny County has been documented as the property owner since the early 1940s. Therefore, it can be inferred that the only previous landowners on record would include, in chronological order, Mr. John Bell, E.E. Rieck and C.F. Nettrour, and the United States Government.

4.2 Environmental Setting

4.2.1 Topographic Features

In general, Pittsburgh is located in a portion of the Allegheny Plateau where a nearly flat surface has been dissected by drainage. The local topography is steep-sided valleys with vertical relief up to 500 feet or more. The upland areas generally lie at an elevation greater than 1,200 feet above mean sea level (MSL) and constitute about 10 to 20 percent of the surface area of the region. The valley slopes account for about 50 to 70 percent of the area, while the bottomlands make up about 20 percent or less. The lowest elevation in Allegheny County is approximately 670 feet above MSL where the Ohio River leaves the county.

To the north of the T-Ramp, an unnamed tributary flows parallel to Interstate 376 Business (formerly Business Route 60), joins McClarens Run and then flows into Montour Run. The GPIA Old Terminal, including the T-Ramp area, was graded during construction in 1946 and is now essentially flat and lies at an elevation of approximately 1,150 feet above MSL. The concrete apron installed across the surface is slightly sloped to allow for collection of stormwater.

4.2.2 Utilities Available to the Site

For logistical reasons, this section assumes that any future need of utilities at the T-Ramp will be to suit the needs of the 911 AW and access to these utilities will be provided from 911 AW property. The best source of data for existing utilities is the “*General Plan – Pittsburgh International Airport Air Reserve Station (IAP ARS)*” (see Appendix A, Reference no. 28) and the current underground utilities drawing as supplied by ACAA (see **Figure 3**, Appendix E).

Water Supply: Currently, the T-Ramp is not serviced by a water supply. The 911 AW obtains its potable water by purchase from the Moon Township Municipal Authority. The source of the water is the 1.5 million gallon elevated tank located adjacent to the T-Ramp. A 12” ductile iron pipe (DIP) potable water main is located within the T-Ramp boundary along the northeastern pavement boundary and supplies potable water to the Airside Business Park buildings.

Sanitary Sewer System: Currently, the T-Ramp is not serviced by the sanitary sewer system. The 911 AW and surrounding buildings are serviced by the Moon Township Municipal Authority, whose main collection line runs parallel to the 911 AW’s western border and Interstate 376 Business (formerly Business Route 60).

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Stormwater Sewer System: As provided on **Figure 6** (Appendix E) and described in the Pittsburgh IAP ARS Stormwater Pollution Prevention Plan (see Appendix A, Reference No. 51), the stormwater runoff from the T-Ramp pavement is conveyed through three inlet structures to two different outfalls:

- One inlet in the northern end of the T-Ramp, drains through the Airside Business Park stormwater management pond and into the Unnamed Tributary to McClarens Run; and
- Two inlets in the middle and southern portions of the T-Ramp drain to Pittsburgh IAP ARS's Industrial Outfall 001. The ARS discharge into Outfall 001 is combined with the upstream ACAA discharge, which is permitted under PIT's NPDES stormwater permit. This outfall discharges to McClarens Run beyond the southeastern corner of the base.
- ACAA is responsible for maintaining both of these outfalls.

Natural Gas: The T-Ramp is not currently serviced by natural gas. According to the 1998 *General Plan* (see Appendix A, Reference no. 28), the majority of the 911 AW buildings are serviced with natural gas by Peoples Natural Gas, including buildings 417, 416, 102, and 103.

Electrical: Although there are no readily accessible outlets or junction boxes present, the T-Ramp is serviced by electricity for runway lighting at the two small, grassy islands along the southeast border. A primary underground electrical line runs adjacent to and underneath Sabre Street, near the water tower, adjacent to the T-Ramp, with underground service lines to the neighboring buildings. This primary line also services the water tower directly.

4.3 Airspace Management

This EA/EBS evaluated potential impacts to airspace management as a result of the proposed action.

As the airfield at the Pittsburgh IAP ARS is operated and maintained by the Allegheny County Airport Authority, Federal Aviation Administration (FAA) regulations exist to promote the safe operation of aircraft and to minimize additional damage and injury in the event of aircraft accidents. Current FAA airfield safety clearance criteria for operational areas per Federal Aviation Regulation (FAR) *14 CFR Part 77* include: the runway protection zone, a trapezoidal area centered on the extended runway centerline with 34:1 or 50:1 sloped approach zones, and the building restriction line, a safety zone extending 750 feet to either side of the runway centerline. The apron clearance line extends horizontally 125 feet from the edge of the aircraft parking apron.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

The T-Ramp is located on the PIT airfield adjacent to and north of the current 911 AW apron. 911 AW aircraft utilize Taxiway N, which is located along the south/southwest of the T-Ramp, to access cross-wind runway 14/32 and the other PIT airfield runways and taxiways. As the T-Ramp provides apron parking space for military aircraft, there are no obstructions present that violate airfield setbacks or Part 77 surfaces within the T-Ramp area.

4.4 Noise

This EA/EBS evaluated potential impacts on surrounding communities from aircraft noise as a result of the proposed action.

In 2006, the ACAA reassessed the impact of aircraft noise on communities in the vicinity of PIT (see Appendix A, Reference no. 8 “Noise Exposure Maps Update, Pittsburgh International Airport, Summer 2006”). New noise contours were generated to estimate aircraft noise impacts in 2005 and to forecast impacts for 2010. The PIT Noise Exposure Maps (NEMs) were updated at this time under the provisions of Federal Aviation Regulations (FAR) *14 CFR Part 150, Airport Noise Compatibility Planning*. This noise assessment included military aircraft operations on the T-Ramp.

In 1993, the FAA also approved a Noise Compatibility Program (NCP) for PIT. The NCP established measures for reducing the impact of the Airport’s operation on surrounding communities. These measures remain in place today and have continued to be very effective in minimizing the noise impact of aircraft operations. Consequently, PIT’s NCP is up to date and noise mitigation measures are summarized in Appendix A, Reference no. 8.

In September 2007, a preliminary noise assessment was prepared for the proposed temporary aircraft operational changes as a result of occasional Lockheed C-130 military transport aircraft (C-130) tactical patterns by the U.S. Air Force at PIT (see Appendix A, Reference no. 9 - “Noise Assessment, U.S. Air Force Lockheed C-130, North Operations Tactical Patterns”). Although this document does not provide specific reference to the operations on the T-Ramp, it does provide background noise information regarding operation of the C-130 aircraft that will be parked on the T-Ramp.

This 2007 noise assessment concluded that no changes to the 2006 Noise Exposure Maps Update report were needed. The FAR Part 150 threshold increase for significant impact (1.5 Day/Night Average Sound Level or DNL) was not exceeded. A 1.5 DNL or greater threshold increase is the benchmark also used to trigger environmental actions requiring at least an Environmental Assessment for airport development projects. The greatest predicted increase in the 65 DNL contour at an off airport noise sensitive site is 0.5 DNL (Resurrection Cemetery). Therefore, no further action requiring additional study, changes, and/or approvals was needed.

4.5 Air Quality

This EA/EBS evaluated potential air quality impacts of the proposed action with respect to the applicable national ambient air quality standards (NAAQS) and the provisions of the USEPA, PADEP conformity rules, and the Allegheny County Health Department (ACHD) Air Quality Regulations section §2109.20.

Specifically, the USEPA established National Ambient Air Quality Standards (NAAQS) for specific pollutants. The criteria pollutants are carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀), and lead (Pb). Areas that do not meet these federal NAAQS, state or local standards are called “non-attainment” areas and areas that meet these standards are known as “attainment” areas.

According to the ACHD’s most recent 2010 Air Quality Annual Report (see Appendix A, Reference no. 44), Allegheny County is in attainment of the NAAQS for the following criteria pollutants: PM₁₀, sulfur dioxide, carbon monoxide, nitrogen dioxide and lead; and in nonattainment for ozone and PM_{2.5}.

Air Quality Conformity Analysis

As required by *Air Force Instruction 32-7040*, *32 CFR Part 989.30 Air Quality*, and *Section 176(c) of the Clean Air Act Amendments of 1990*, *42 U.S.C. 7506(c)*, a conformity evaluation must be performed when a Federal action generates air pollutants above de minimis thresholds in a region that has been designated a non-attainment or maintenance area for one or more NAAQS. This Conformity Analysis is provided in Appendix J.

This Conformity evaluation concluded that as the emissions generated from the proposed action will not increase, the action is classified as exempt as defined by USEPA in *40 CFR Part 93.153(c)(2)*. In addition, the proposed action is presumed to conform to the Pennsylvania State Implementation Plan (SIP) and no further Conformity Determination is required.

4.6 Safety and Occupational Health

As outlined in the *General Plan* (see Appendix A, Reference no. 28), the Pittsburgh IAP ARS operates under safety and occupational health guidelines which take into account established factors including clear zones and other imaginary surfaces required to safeguard against aircraft accidents, noise, electromagnetic radiation, and other safety restrictions. In order to create “an efficient, safe, and pleasant environment” for base personnel, established working practices and standard operating procedures are adhered to by 911 AW personnel as established by the Air Force and FAA and defined by the following: FAA regulation *14 CFR Part 150 (noise)*, Federal Aviation Regulation (FAR) *14 CFR Part 77 (airfield safety criteria)*, and FAA Criteria *AC 150/5300-13 (planning/design criteria and standards for airfields including dimensions, clearance, and grades for airfield operational areas)*.

Other safety considerations at the Pittsburgh IAP ARS involve explosive storage and transportation at the base. Such activity involves designated areas constrained by explosive safety-quantity distance (Q/D) zones and the execution of an Explosives Site Plan (ESP) to any area not previously approved for explosives. Explosive safety criteria, site planning procedures, and exemptions and waivers to these requirements are established and implemented through the *Air Force Manual (AFM) 91-201 Explosive Standards* with subsequent approval by the Department of Defense Explosives Safety Board (DDESB). A map illustrating the primary and alternate explosive supply route, in addition to licensed explosive storage facilities can be found in Figure 4.10 of the *General Plan* (See Appendix A, Reference No. 28).

4.7 Hazardous Substances

As outlined in the *General Plan* (see Appendix A, Reference no. 28) the Pittsburgh IAP ARS operates under a comprehensive set of policies and plans so as not to adversely affect the surrounding natural environment. These policies and plans are described in the following 911 AW plans and overseen by the Environmental Safety and Occupational Health Council, which reviews policy and serves as a steering group to coordinate and monitor the overall environmental, safety, and occupational health program:

- *Installation Restoration Program (IRP);*
- *Management Action Plan (MAP);*
- *Hazardous Waste Management Plan;*
- *Solid Waste Management Plan (SWMP);*
- *Asbestos Plan;*
- *Lead Based Paint Management Plan;*
- *Pest Management Plan;*
- *Stormwater Pollution Prevention Plan;*
- *Hazardous Material Emergency Planning and Response (HAZMAT) Plan;*
- *Pollution Prevention Management Action Plan.*

As the operator of the T-Ramp since 1993, the 911 AW has conducted its operations and use of the T-Ramp within the guidelines provided in these documents.

4.7.1 Hazardous Materials and Hazardous Waste

The 911 AW defines hazardous materials as “those corrosive, toxic, flammable and reactive materials that, when spilled or released into the environment, have the potential to be dangerous to the public health or the environment” (see Appendix A, Reference no. 28). This can include motor oil, gasoline, jet fuel, coolants, hydraulic fluids, paints, paint thinners,

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

paint strippers, and degreasers. For this EA/EBS, motor oil, gasoline, and jet fuel are discussed below in Section 4.7.2. At the Pittsburgh IAP ARS, Building 319 serves as the hazardous materials pharmacy with Building 318 as an additional, if necessary, on-base storage of hazardous materials. In addition, hazardous materials are stored in multiple buildings at the 911 AW for use by aircraft and vehicle maintenance shops.

Hazardous waste at the 911 AW, as a result of day-to-day operations, is accumulated at several facilities including aircraft/vehicle maintenance areas and utility shops. Hazardous wastes, when generated, are stored at previously designated accumulation points prior to final removal and disposal by the Defense Reutilization and Marketing Office (DRMO) or private contractors.

The base hazardous waste accumulation point is Building 335, while the base hazardous materials storage is Building 319. These buildings are shown on Figure 4.7 in the base *General Plan* (see Appendix A, Reference no. 28). The 911 AW's Hazardous Waste Management Plan provides inventories which identify the types of hazardous wastes while the HAZMAT Plan adds guidance on minimizing the quantity and effects of accidental material releases.

As indicated on **Figure 6** (Appendix E), the T-Ramp property is not currently used to store any hazardous substance, material, or waste and has not since the 911 AW began using this apron in 1993. Additionally, there were no records discovered by the CDM Smith team that indicates that the T-Ramp was used for these purposes.

4.7.2 Petroleum Products and Petroleum Waste

The storage, transport, use, and disposal of petroleum products and generated petroleum wastes are conducted at the Pittsburgh IAP ARS within the same guidelines in the Hazardous Materials and Hazardous Waste Section 4.7.1 above.

Currently, there is no storage of petroleum products or petroleum waste on the T-Ramp. However, JP-8 fuel is present in the C-130H aircraft fuel tanks that are parked on the T-Ramp. Regarding incidental or accidental spills of JP-8 fuel on the T-Ramp from these aircraft, the HAZMAT Plan is strictly enforced and adhered to by 911 AW personnel in order to prevent and minimize spills and their effects of releases of petroleum products.

As part of this EA/EBS, a Phase II Investigation was conducted by the CDM Smith team to determine the presence of recognized environmental conditions (RECs) present at the T-Ramp property (see Appendix I). Specifically, this Phase II focused on determining if the subsurface soil and groundwater beneath the T-Ramp was impacted by the historic release of Jet A fuel from the former Old Terminal Fuel Distribution System,

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

which was located to the immediate west of the T-Ramp. Based on a review of related documents, including a previous EBS performed in 1996 (see Appendix A, Reference no. 1), a Sampling and Analysis Plan was developed to identify the most likely hazardous substance or petroleum products that may be present at the T-Ramp. This plan, described in Section 2.1.4, consisted of collecting subsurface soil samples with subsequent laboratory analysis for TCL-VOCs and total lead, and groundwater sampling and analysis for TCL-VOCs, dissolved lead, and EDB. Laboratory analytical results were then reviewed by the CDM Smith team and found to be below PA Act 2 Non-Residential Statewide Health Standards for soil and Non-use Aquifer, Non-Residential Statewide Health Standards for groundwater. Based on these findings, the following statement was made by the CDM Smith team in the EBS Phase II Investigation Report (Appendix I):

“Based on previous documentation, hazardous substances or petroleum products may have previously been released or disposed at or adjacent to the T-Ramp. However, with respect to the RECs assessed, there is no evidence that a release at, or adjacent to, the T-Ramp has significantly impacted the property soil or groundwater.”

Additionally, the CDM Smith team concluded in the EBS Phase II Investigation that no further environmental investigation at the T-Ramp is recommended.

4.8 Installation Restoration Program Contamination - Open and Closed Sites

The Installation Restoration Program (IRP) is an Air Force environmental program designed to identify, characterize, and remediate environmental contamination on an installation. The program establishes a process to evaluate potentially contaminated release and disposal sites, control the transfer of contaminants, control potential hazards to human health and the environment, and conduct environmental restoration activities as required. Air Force Instruction (AFI) 32-7020 *Environmental Restoration Program* implements *Air Force Policy Directive 32-70, Environmental Quality*. It provides guidance and procedures for executing the Air Force Environmental Restoration Program, referred to as the “cleanup program.”

To comply with these requirements, the 911 AW has developed a Management Action Plan (MAP) that summarizes the current status of the Pittsburgh IAP ARS environmental restoration and associated compliance program and presents a comprehensive strategy for implementing response actions necessary to protect human health and the environment (see Appendix A, Reference no. 45). This strategy integrates activities being performed under both the Installation Restoration Program (IRP) and the associated environmental compliance programs to support full restoration of the base. In addition to this document, the 911 AW summarizes their IRP activities in the “CERCLA Administrative Record

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

for IRP Activities at 911 Airlift Wing Air Reserve Station” (see Appendix A, Reference no. 46).

The first phase of the IRP was initiated in 1984. This activity consisted of a Phase I Records Search to identify potential sites of concern which warranted further investigation. In accordance with USAF policy, all IRP sites at the base are addressed in a manner consistent with the CERCLA process. None of the sites are on the National Priorities List (NPL).

As described in these documents, the Pittsburgh IAP ARS IRP program includes seven sites, which are identified on **Figure 5** – Installation Restoration Program (IRP) Site Status (see Appendix E).

In summary, decision documents for all seven sites were approved by PADEP and the base IRP was formerly concluded (e.g., all seven sites were closed) in 2002, which was also recognized by PADEP. Therefore, no compliance issues at Pittsburgh IAP ARS are being addressed under the IRP, and none are anticipated to be handled in this manner in the future. In addition, none of these IRP sites are located on or within close proximity of the T-Ramp area.

4.9 Storage Tanks

4.9.1 Aboveground Storage Tanks

As indicated on **Figure 6** (Appendix E), no aboveground storage tanks (ASTs) are currently in use or have ever been present within the T-Ramp area, as this parcel was formerly part of PIT Runway 23.

4.9.2 Underground Storage Tanks

As indicated on **Figure 6** (Appendix E), no underground storage tanks (USTs) are currently in use or have ever been present within the T-Ramp area, as this parcel was formerly part of PIT Runway 23.

4.9.3 Pipelines, Hydrant Fueling, and Transfer Systems

As described in Section 2.1.1 of this EA/EBS, between the 1950s and 1992, the Fuel Distribution System at the former Greater Pittsburgh International Airport Old Terminal was in operation. As indicated on **Figures 3 and 4** (Appendix E), this Fuel Distribution System was located near the western boundary of the T-Ramp parcel.

Jet A fuel was conveyed from the adjacent Fuel Farm through underground piping around the airplane docks of the former Old Terminal where airplane refueling took place. Jet A fuel was released into the environment through leaks and spills during this time period.

Soil remediation was conducted at six "sites" along the Fuel Distribution System in the summer of 1997. The selected remediation alternative was excavation of impacted soil and proper off-site disposal. A total of 2,305 tons (approximately 1,350 cubic yards) of soil was excavated and transported to the BFI Imperial Landfill for disposal.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Analytical data revealed that demonstration of attainment for soil was achieved at the six remediation "sites." Therefore, no further action for soil was recommended and a PADEP release of liability for the six soil "sites" was secured by the ACAA.

Groundwater samples from the onsite monitoring wells had petroleum constituent concentrations below the PADEP Statewide health, non-use aquifer, non-residential groundwater standards. A contaminant plume does not exist in groundwater encountered in bedrock aquifers or perched water. Therefore, no further action was required for groundwater.

In addition, analytical data revealed that stormwater samples had organic petroleum constituent concentrations below the applicable PADEP groundwater standards; therefore, petroleum contaminants did not impact perched water or surface water bodies.

2012 Soil and Groundwater Sampling Results from the EBS Phase II

As provided in Section 4.7.2, CDM Smith team determined through subsurface sampling and analysis of soil and groundwater during the EBS Phase II Investigation (Appendix I) that:

"Based on previous documentation, hazardous substances or petroleum products may have previously been released or disposed at or adjacent to the T-Ramp. However, with respect to the RECs assessed, there is no evidence that a release at, or adjacent to, the T-Ramp has significantly impacted the property soil or groundwater."

4.10 Oil/Water Separators

No oil/water separators are currently or have ever been present within the T-Ramp area, as this parcel was formerly part of PIT Runway 23. Also, the three storm inlets that drain stormwater runoff from the T-Ramp area do not discharge through oil/water separators.

However, three oil/water separators are located at the Pittsburgh IAP ARS. For example, the stormwater runoff from aprons and the base gas station (Building 322) is treated by oil/water separators prior to discharge to the stormwater collection system. The POL area also has an oil/water separator that discharges to the storm sewer. Locations of the oil/water separators on base are identified on **Figure 6** (Appendix E).

4.11 Solid Waste

The Pittsburgh IAP ARS, as discussed in Section 4.7, has prepared and operates under a SWMP for storage, collection, transport, recycling, re-use, and disposal of non-hazardous solid waste. Solid waste produced by the 911 AW operations is collected in bulk containers and dumpsters that are subsequently collected by private contractors and transported and disposed of at a regional landfill. As stated in the *General Plan* (see Appendix A, Reference no. 28), there are no active landfills at the installation.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

There are currently no solid waste dumpsters located at the T-Ramp property, nor has the T-Ramp been used as a landfill or solid waste disposal/collection area. This is reinforced by the fact that, as a former runway and current aircraft parking area, it is important that the T-Ramp remain free of Foreign Object Debris (FOD).

As previously stated, the T-Ramp area was historically an area of heavy regrading and filling to level the property and surrounding areas to their current elevations. The nature of the fill is currently unknown, however, it is likely that it consists of construction debris and common fill as identified when drilling boring K-6 during the EBS Phase II likely encountered rebar-reinforced concrete rubble (see Appendix I, Section 3.1.4). However, no evidence of solid waste disposal was discovered during the Phase II Investigation.

4.12 Medical, Biological or Infectious Waste

Based on the documents reviewed during this EA/EBS, neither the Pittsburgh IAP ARS, nor the ACAA has a history of storing, transporting, or disposing of medical, biological or infectious waste at the T-Ramp. Additionally, there was no evidence of medical, biological or infectious waste discovered at the T-Ramp during the site visit and subsurface investigation.

4.13 Radioactive Waste

Based on the documents reviewed for this EA/EBS, neither the Pittsburgh IAP ARS, nor the ACAA has a history of storing, transporting, or disposing of radioactive waste at the T-Ramp. Additionally, there was no evidence of radioactive waste at the site observed during the site visit and subsurface investigation.

4.14 Pesticides

The Pittsburgh IAP ARS uses pesticides to control pests according to their Integrated Pest Management Plan. Pittsburgh IAP ARS employs a low pesticide use and application policy by implementing Integrated Pest Management, which consists of the judicious use of both nonchemical and chemical control techniques to reduce pest populations to an acceptable level with minimal environmental contamination.

Herbicides are used to control weeds around the base perimeter fence lines and in the grassy areas on base. Insecticides and rodenticides are used to control mostly wasps and bees outdoors, and mice and ants indoors. There has not been a need to spray for mosquitoes, due to the lack of standing water. No pesticides are stored on base, except for some limited use pesticides that are stored in Building 342.

The T-Ramp apron is located on the PIT airfield and this predominantly paved area does not support any wildlife. There are no buildings constructed on the T-Ramp, so indoor pests are not a concern. Therefore, there is no application of pesticides at the T-Ramp, with the exception of limited use of herbicides to control weeds between pavement cracks. Additionally, the Bird Aircraft Strike

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Hazard (BASH) Plan identifies and utilizes land management techniques, including managing grass height and drainage areas, which deter birds from the paved apron and reduce the need for pesticides in the area of the T-Ramp.

4.15 Ordnance

As stated in Section 4.6, the Pittsburgh IAP ARS transports and stores explosives in accordance with the base-determined, and Air Force-approved, Q/D zones and ESPs. The T-Ramp is not an approved storage location for any ordnance, nor has it historically been an ordnance storage location.

4.16 Asbestos

There have never been any buildings located upon the T-Ramp; therefore, an Asbestos Containing Material (ACM) survey was not required as part of this EA/EBS or the Phase II Investigation.

4.17 Polychlorinated Biphenyls

Per the *General Plan*, Section 4.2.2.4, (see Appendix A, Reference no. 28), the Pittsburgh IAP ARS completed a Polychlorinated Biphenyls (PCBs) removal program in fiscal year 1991 which included the identification and removal of PCB containing equipment. The *General Plan* also states that there are no PCB transformers or capacitors present on base.

Based on the documents reviewed for this EA/EBS, neither the Pittsburgh IAP ARS, nor the ACAA has a history of storing, transporting, or disposing of PCB containing equipment at the T-Ramp. Additionally, there was no evidence of PCB containing equipment discovered at the T-Ramp as revealed by the site visit and subsurface investigation.

4.18 Radon

Radon is an odorless, colorless, and tasteless radioactive gas that comes from the natural breakdown of uranium in soil and rock. It moves through the ground and into building air through cracks and other holes in the foundation where it can accumulate to unsafe levels.

As required by Sections 307 and 309 of the *Indoor Radon Abatement Act of 1988 (IRAA)*, EPA classified Allegheny County, Pennsylvania as EPA Zone 1 with potential for elevated indoor radon screening level greater than 4 pCi/L (picocuries per liter). However, even though radon may be present in the subsurface, there is no history of buildings at the T-Ramp and radon is therefore not suspected to present an exposure pathway to 911 AW personnel that access the T-Ramp property. Testing was not conducted as part of this EBS or Phase II Investigation because there are no buildings present at the T-Ramp and the groundwater is classified as non-residential.

4.19 Lead-Based Paint

Because there are “older,” active facilities on the Pittsburgh IAP ARS property that contain lead-based paint (LBP) (see Appendix A, Reference no. 28, pg. 4-10),

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

the 911 AW follows the LBP Plan to identify, evaluate, and remediate existing LBP hazards. There is no history of buildings at the T-Ramp; therefore, LBP is not suspected to be present on the T-Ramp property. An LBP survey was not conducted as part of the EBS Phase II Investigation.

4.20 Earth Resources

For the purpose of this EA/EBS, earth resources include geology, soils, and topography. As stated in the Phase II Investigation (Appendix I, Section 4.1.1), the T-Ramp is located within the Pittsburgh Low Plateau Section of the Appalachian Physiographic Province with regional geography generally described as having broad, relatively anticlinal ridges. The Phase II Investigation also revealed that asphalt and concrete covers most of the T-Ramp, ranging in thickness from 1.5 feet to 2.5 feet bgs with bedrock overburden throughout ranging from approximately 2 feet to 24.5 feet bgs. Although rock cores were not collected as part of this Phase II investigation, the majority of rock fragments retrieved by the split-spoon were highly weathered shale and hard, highly fractured sandstone.

The T-Ramp and adjacent properties are comprised by the Culleoka complex and Wharton complex. These complexes are defined in detail according to the *United States Department of Agriculture – Web Soil Survey* (see Appendix A, Reference no. 47) and summarized in the Table 4 below:

Table 4: Summary of Soil Types for T-Ramp

	Urban land - Culleoka complex – gently sloping	Urban land - Culleoka complex – moderately steep	Wharton complex – moderately steep
Mean Annual Precipitation	36-46 inches	36-46 inches	36-46 inches
Mean Annual Air Temperature	41-62 degrees F	41-62 degrees F	46-56 degrees F
Slope	0-8 percent	8-25 percent	8-25 percent
Drainage Class	Well drained	Well drained	Moderately well drained
Parent Material of Urban land	Human transported material	Human transported material	Human transported material
Parent Material of complex	Residuum weathered from bedrock	Residuum weathered from bedrock	Fine-loamy residuum weathered from bedrock

4.21 Water Resources

The hydrological system of the Pittsburgh IAP ARS is comprised of stormwater management systems that discharge stormwater to the unnamed tributary of McClarens Run (just beyond the eastern boundary of the base). The unnamed tributary flows south into Montour Run in the vicinity of the Interstate 376 Business (formerly Business Route 60) interchange. Montour Run flows into the Ohio River just upstream of the town of Coraopolis.

The natural drainage is sloped in a southeasterly direction. Pittsburgh IAP ARS is located near the top of the ridge line occupied by PIT. There are no natural ponds or drainage features on base. Stormwater is transported through nine conveyance systems.

4.21.1 Hydro-geologic Features

The Pittsburgh IAP ARS stormwater system of catch basins and culverts conveys water through a series of natural drainageways, underground pipes, oil/water separators, and man-made ditches. This system conveys stormwater to one of the installation's nine stormwater outfalls, which are located at or near the base boundary. Outfalls 201, 181A, 165, 175, 178, and 111, and industrial outfalls 001 and 400 are located on the eastern side of the base and flow into an unnamed tributary of McClarens Run.

Stormwater discharge points and outfalls are shown on **Figure 6** (Appendix E) and described in the Pittsburgh IAP ARS' Stormwater Pollution Prevention Plan (see Appendix A, Reference No. 51):

- Industrial outfall 001 discharges into a PIT storm sewer discharge that is permitted under their NPDES permit, since the majority of the flow is from the airport facilities.
- Industrial outfall 400 is located on the eastern side of the base. The stormwater from all industrial areas at Pittsburgh IAP ARS drain to Outfall 400, which is permitted under the Pittsburgh IAP ARS Pennsylvania General Permit for Discharges Associated with Industrial Activities (PAR 806167).
- Industrial outfall 082 is located at the southwestern corner of the base and receives drainage from the flight line apron. This is also permitted under PAR 806167.
- The remaining six discharge points (Outfalls 201, 181A, 165, 175, 178, and 111) receive stormwater from non-industrial watersheds.

There are three collection basins located on the T-Ramp that collect and convey stormwater (see **Figures 3 and 6**, Appendix E):

- The northern collection basin conveys stormwater collected on the T-Ramp pavement via a 15" reinforced concrete pipe (RCP) to the north, across Lindbergh Drive, through a stormwater management pond and

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

ultimately discharges into the Unnamed Tributary to McClarens Run to the northeast of the base.

- The remaining two collection basins convey stormwater collected on the southern 2/3rd of the T-Ramp pavement via 15" RCP and discharges to the south into a 30" RCP trunk line that flows to Pittsburgh IAP ARS Industrial outfall 001 and discharges at the southeastern corner of the base to McClarens Run.

The stormwater runoff from aprons and the base gas station (Building 322) is treated by oil/water separators prior to discharge to the stormwater collection system. The POL area also has an oil/water separator that discharges to the storm sewer.

All 911 AW aircraft deicing and anti-icing is conducted on the 911 deicing pad, which is located at the southeastern corner of their flightline apron. This facility includes a collection system, propylene glycol and potassium acetate storage tanks, a used deicing fluid storage tank, and a deicing pad. The deicing pad is surrounded by trench drains on three sides and curbing on the fourth. Deicing runoff flows from the trench drains to a diverter valve that discharges to the storm sewer under normal circumstances and to the used deicing fluid collection storage tank during deicing activities.

No deicing or anti-icing is conducted at the T-Ramp.

4.21.2 Drinking Water Quality

The Pittsburgh IAP ARS potable water is acquired from the Moon Township Municipal Authority (MTMA) system. This system is supplied by groundwater wells located on the south side of the Ohio River. The water is treated at the water treatment plant which includes a chlorination step. The treated water is conveyed to the 200 foot high, 1.5 million gallon elevated water tower located adjacent to the T-Ramp near the POL area. Service lines are provided to the base from the municipal supply system. The water provided to the base system meets all of the EPA's potable water standards. The installation does not perform any potable water treatment. MTMA and 911 AW/SGPB personnel perform periodic water sampling and testing.

No drinking water wells are located within the T-Ramp parcel. A 12" ductile iron pipe (DIP) potable water main is located within the T-Ramp boundary along the northeastern pavement limits and supplies potable water to the Airside Business Park buildings.

4.21.3 Groundwater

In 1996, CDM conducted a "Hydrogeological Study of the Old Terminal Fuel Distribution System," which was located to the immediate west of the T-Ramp area (see Appendix A, Reference no. 14). As this study area was

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

in close proximity to the T-Ramp, the following conclusions would also apply to the T-Ramp:

- Groundwater in bedrock at the airport site exists within and is controlled by fractures.
- Two aquifer zones (shallow and deep) were observed. These zones appear to be related to fractures in the bedrock.
- Water levels in the shallow zone are observed in the elevation range of about 1,113 to 1,118 feet above mean sea level (MSL). Wells completed in this zone are relatively unproductive and show little or no interconnection with other wells completed in similar intervals. Shallow bedrock fractures are commonly occluded by weathering products and sediments.
- Water levels in the deep zone are observed in the range of about 1,090 to 1,106 feet above MSL. Wells completed in this zone are relatively productive and show horizontal interconnections with wells completed in similar intervals over distances of hundreds of feet.
- The strongest responses observed during pumping and packer tests were along an essentially east-west line, parallel to bedding strike. This suggests that hydraulic conductivity is anisotropic and that the preferential orientation is controlled by the bedding strike.
- The vertical hydraulic head difference between the deep and shallow zones, and the lack of observed interconnection during pumping and packer tests, indicates that vertical hydraulic interconnection (if any) between the zones is not significant.
- Reliable horizontal hydraulic gradients for the two aquifer zones cannot be determined, due to the averaging effect of hydraulic heads, measured in wells open to different intervals and different interconnected fractures. Furthermore, in an anisotropic fractured rock aquifer, horizontal hydraulic gradient direction is not equivalent to flow direction.
- Permanent streams exist east and west of the site with elevations at or below the water elevations observed in groundwater. It is likely that these streams are discharge receptors for groundwater at the site (e.g., McClarens Run and its unnamed tributary to the east of the base).

In addition to this study, a “Non-use aquifer” designation was secured in November 1999 for the groundwater aquifer in the vicinity of the Old Terminal (see Appendix A, Reference no. 10). This study confirmed that there were no public water supply sources or PADEP Zone II wellhead protection areas within 1/2 mile of the “described area,” which includes the T-Ramp parcel.

4.21.4 Wastewater Treatment, Collection, and Discharge

Pittsburgh IAP ARS' wastewater consists of sanitary waste collected by the base sanitary sewer system before being discharged to the Moon Township sanitary sewer lines and ultimately conveyed to the Moon Township Municipal Authority Wastewater Treatment Plant, a publicly owned wastewater treatment works (POTW). There is not industrial wastewater produced or OWSs in the sanitary system.

4.22 Biological Resources

4.22.1 Wetlands

Executive Order 11900, Protection of Wetlands, defines jurisdictional wetlands to "generally include swamps, bogs and similar areas such as sloughs, mud flats and natural ponds that are inundated by surface or groundwater with a frequency sufficient to support prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction." Permanent water such as streams, reservoirs and deep lakes are not considered to be wetlands.

The T-Ramp apron is located on the PIT airfield and does not have any areas which have been identified as wetlands. Refer to **Figure 7 – Environmental and Infrastructure Mapping for PIT** (Appendix E).

4.22.2 Flood Plains

Executive Order 11988, Flood Plain Management, defines flood plains as lowland and relatively flat areas adjoining inland and coastal water that would be inundated by a 100-year flood. Federal agencies are required to "reduce the risk of flood loss to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by flood plains."

The T-Ramp apron is located on the PIT airfield at an elevation of approximately 1,150 feet above mean sea level (MSL), which is not within any 50- or 100-year flood plains. For reference, streams adjacent to the site range in elevation from approximately 1,100 to 1,000 above MSL.

4.22.3 Protected Species

Of the nearly 115 acres comprising Pittsburgh IAP ARS, only a small portion (less than one acre) is undeveloped woodland capable of providing wildlife habitat. Most wooded areas at the station have been developed. The small wooded area that remains undeveloped is located along the eastern base boundary and the unnamed tributary to McClarens Run. The base also does not have any areas which have been identified as mature woods.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

The wooded area and the landscaped portions of the base support a variety of birds and small mammals. Cotton-tail rabbits, woodchucks, skunks and raccoons represent some of the indigenous species of the area. Larger mammal species such as fox and deer have been seen near the base as well. However, their populations have been significantly limited by the lack of natural habitat and boundary fencing.

Additionally, there are no water bodies or streams within the Pittsburgh IAP ARS base boundaries. Therefore, no habitat exists which could support aquatic life.

As the T-Ramp apron is located on the PIT airfield, this predominantly paved area does not support any wildlife. In addition, there are no known threatened, endangered, or locally rare wildlife species or habitats at the Pittsburgh IAP ARS. The following agencies reviewed the potential impact of this proposed action with regard to:

- The U.S. Fish and Wildlife Service responded on March 1, 2012 that “No federally listed species under our jurisdiction is known or likely to occur in the project area” (see Appendix A, Reference no. 48).
- The PA Game Commission responded on February 23, 2012 that “PNDI records indicate species or resources of concern are located in the vicinity of the project. However, based on the information you submitted concerning the nature of the project, the immediate location, and our detailed resource information, the PGC has determined that no impact is likely. Therefore, no future coordination with the PGC will be necessary for this project at this time” (see Appendix A, Reference no. 49).

4.23 Cultural Resources

4.23.1 Archaeological/Historic Sites

According the Pittsburgh IAP ARS *General Plan* (see Appendix A, Reference no. 28), in 1997, the installation prepared a *Cultural Resources Management Plan* in order to identify historic buildings and archaeological resources at the base. Neither historic buildings nor archaeological resources were identified during the survey. The Plan also stated that past construction and grading have extensively disturbed the grounds at the base. Due to the geographic limitations of the archaeological survey, the Plan provides procedures for verifying the absence of resources in undisturbed portions of the base. As long as those procedures are followed, future installation development should not be constrained by historic and/or archaeological resources.

According to the letter received by the PA Historical and Museum Commission on March 16, 2012, the proposed action will have no effect on any identified historic or archaeological resources (see Appendix A,

Reference no. 50).

4.23.2 Native American Issues

The state of Pennsylvania resides within USEPA Region 3, and, according to the EPA website, Region 3 does not contain federally-recognized Native American tribes. Additionally, the State of Pennsylvania, according to the National Conference of State Legislatures and the U.S. Department of the Interior – Indian Affairs, does not have any state recognized Native American tribes. Therefore, Native American issues regarding the T-Ramp and/or adjacent properties with regards to site development are not anticipated.

4.24 Socioeconomics

According to the Pittsburgh IAP ARS *General Plan* (see Appendix A, Reference no. 28), the 911 AW is located within the six-county Pittsburgh Metropolitan Statistical Area (MSA). The Air Reserve Station is located within the largest county in the MSA, Allegheny County, with a population of roughly 1.23 million. Although it has a large population, the region's demographics are characterized by slow population growth. The region also possesses a generally older population than many metropolitan areas in the country.

According to www.usa.com, as of 2010, the total Allegheny county population is 1,223,348, which has shrunk 4.55% since 2000. The population growth rate is much lower than the state average rate of 3.43% and is much lower than the national average rate of 9.71%. Allegheny County median household income is \$47,505 in 2010 and has grown by 23.94% since 2000. The income growth rate is about the same as the state average rate of 22.89% and is higher than the national average rate of 19.17%. Allegheny County median house value is \$119,000 in 2010 and has grown by 41.33% since 2000. The house value growth rate is much lower than the state average rate of 70.62% and is lower than the national average rate of 50.42%. As a reference, the national Consumer Price Index (CPI) inflation rate for the same period is 26.63%.

The city of Pittsburgh is the largest municipality within Allegheny County and supports several industries of national and world-wide export including Alcoa, Bayer, Calgon Carbon, Del Monte Foods, FedEx Ground, Freemarkets, GlaxoSmithKline, H.J. Heinz Company, PNC Financial Services Group, PPG Industries, Sony Electronics, US Steel Corporation and Westinghouse Electric Company.

With roughly 1,700 jobs associated with the operation of the base, Pittsburgh IAP ARS easily ranks among the top ten employers in Allegheny County. The budget of the 911 AW for salaries and operating expenses exceeds \$34 million annually, including \$16 million in civilian salaries, \$7 million in operating expenses, and \$11 million in Reservists' payroll and travel. Facilities construction has added \$30 million in recent years to the area economy. The 911 AW's overall economic impact to the area is estimated to be around \$113 million annually.

4.25 Environmental Justice

“Environmental Justice” refers to the disproportionately high and adverse environmental effects on minority and low-income populations that may occur as a result of federal projects.

As required by *40 CFR Part 989.33 – Environmental Justice* and in accordance with *Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, and the accompanying *Presidential Memorandum of February 11, 1994*, possible environmental justice impacts must be analyzed for the proposed action. This Presidential memorandum specifies that the environmental justice analysis should be accomplished as part of the NEPA analysis. If there is no environmental impact, there is no need for an environmental justice analysis.

The US Air Force's *Guide for the Environmental Justice Analysis with the Environmental Impact Analysis Process (EIAP)* (November, 1997) provides a general approach for conducting environmental justice analysis in conjunction with the environmental impact analysis in accordance with the NEPA process. It includes a ten-step Environmental Justice flowchart, which provides a model framework for addressing the concerns of low-income and minority populations. The flowchart is designed to achieve the objective of engaging these populations throughout the impact assessment process.

Environmental justice analysis is necessary only if the environmental impact analysis indicates that there may be impacts. If there would be no environmental impacts on human populations, then there would be no disproportionate environmental impacts on minority or low-income populations.

The T-Ramp parcel is a secured, predominantly paved area located on the PIT airfield and therefore is not accessible to the general public. No homes or businesses are located on the T-Ramp site. The nearest businesses are located 750 – 1,000 ft north and northeast of the T-Ramp, across Interstate 376 Business.

4.26 Recreational and Visual Resources

Recreation resources include any opportunities for recreation in relation to the proposed action. Recreational resources are reviewed to determine the impact of the proposed action on those resources.

Visual resources consist of natural elements (e.g., vegetation, landscape, water bodies, mountains) and the manmade structures which typically make up the viewing environment. Visual resources are reviewed to determine the compatibility of construction projects within a surrounding environment.

Visual resources at Pittsburgh IAP ARS consist of man-made landscape features and natural features that appear indigenous to the area. Specifically, the T-Ramp parcel is a secured, predominantly paved area located on the PIT airfield used to park aircraft. There are no recreational or unique visual resources present on the T-Ramp Parcel.

4.27 Transportation

Vehicular access to Pittsburgh IAP ARS is limited to the Main Gate, which is staffed 24 hours a day. The route to the main gate is via an access road which originates west of the Interstate 376 Business (formerly Business Route 60) interchange and terminates at the main gate.

Interstate 376 Business (formerly Business Route 60) runs adjacent to the installation along its eastern border. It serves as the link between the base and Interstate 79, located approximately 8 miles to the southeast. Interstate 79 connects Pittsburgh with Erie, Pennsylvania to the north and Charleston, West Virginia to the south. The on-base street system consists of Defense Avenue, a primary road providing access off-base, and Carter Street, a primary road that forms a partial loop before terminating in the vicinity of the Base Civil Engineer complex.

Defense Avenue begins at the main gate and provides access to individual parking lots and minor streets prior to its terminal point at Building 409. Carter Street begins at its intersection with Defense Avenue west of Building 206 and serves the dormitories, and base supply and engineering complexes.

The T-Ramp parcel is a secured, predominantly paved apron area located on the PIT airfield, and therefore, is not accessible to the general public. Only 911 AW C-130 aircraft use this area for parking purposes during construction activity on the 911 AW aircraft apron. The property also provides additional apron space for the 911 AW for visiting military aircraft, including Air Force One and supporting aircraft. 911 AW vehicles also use the T-Ramp to provide support to the parked aircraft.

5. ENVIRONMENTAL IMPACTS

As described in Section 3.2 of this EA/EBS, the following Alternatives were identified in addition to the proposed action:

- **No-Action Alternative:** The 911 AW does not acquire the T-Ramp property by lease.
- **Alternative 1:** Continue to extend MOA annually.
- **Alternative 2:** Lease less than the approximately 26 acres of space at the T-Ramp.
- **Alternative 3:** Consider other contiguous locations that satisfy purpose and need of this action.
- **Alternative 4:** Consider other non-contiguous locations that satisfy purpose and need of this action.

Based on the analysis of this EA/EBS, none of these alternatives were identified as practicable alternatives for the proposed action for those reasons identified in Section 3.2. Therefore, this section only describes the environmental impacts of the proposed action and no action alternative on the affected environment described in Section 4.

5.1 Land Use

As stated in the Executive Summary, the 911 AW plans to continue the use of the T-Ramp in accordance with the MOA. Unfortunately, the portions of the pavement and joint sealant of the T-Ramp have been determined to be unsafe for aircraft operations, per ACAA officials, and the ACAA has no plans to repair these areas deemed unsafe. Upon acceptance of this EA/EBS, and subsequent acquisition by lease of the T-Ramp, the 911 AW will continue operations at the T-Ramp property as described. Neither the proposed action nor the no action alternative will adversely impact the current land use by ACAA or the 911 AW.

5.2 Airspace Management

The proposed action will not change the current use of the T-Ramp parcel as an aircraft apron within the Air Operations Area of the Pittsburgh International Airport. Therefore, neither the proposed action nor the no action alternative will change the Controlled Airspace around Pittsburgh IAP ARS or adversely impact the procedures established to manage and control air traffic in the area.

5.3 Noise

Noise studies for the 911 AW operations indicated that current operations did not significantly impact the existing PIT Noise Exposure Maps (NEMs) or their Noise Compatibility Program (NCP).

Therefore, neither the proposed action nor the no action alternative will increase noise levels, nor will they exceed the FAR Part 150 threshold increase for significant impact (1.5 DNL) to trigger additional evaluation.

5.4 Air Quality

As concluded in the General Conformity evaluation (see Appendix J), since the proposed action will not increase air emissions, neither the proposed action nor the no action alternative will adversely impact air quality. In addition, the proposed action is presumed to conform to the SIP and no further conformity analysis is required.

5.5 Safety and Occupational Health

The proposed action will not deviate from the existing property use; therefore, the same safety and occupational health procedures and plans will remain in place. Additionally, neither the proposed action nor the no action alternative will increase the need for greater levels of protection for safety and occupational health of the Pittsburgh IAP ARS, ACAA personnel or the public.

5.6 Hazardous Substances

Under the proposed action, no significant changes would be necessary to the current Pittsburgh IAP ARS HAZMAT Plan. Neither the proposed action nor the no action alternative would introduce new or increased levels of hazardous substances to the T-Ramp or surrounding properties.

5.7 Earth Resources

The earth resources associated with the T-Ramp property primarily consist of fill to achieve grade (human transported material), which are overlain by the concrete and asphalt apron. Earth disturbance is not associated with the proposed action or the no action alternative. Therefore, earth resources at and adjacent to the T-Ramp will not be adversely impacted by the proposed action or no action alternative.

5.8 Water Resources

Stormwater: The stormwater runoff from the T-Ramp pavement is conveyed through three inlet structures to two different outfalls:

- One inlet in the northern end of the T-Ramp, through the Airside Business Park stormwater management pond and into the unnamed tributary to McClarens Run; and
- Two inlets in the middle and southern portions of the T-Ramp to PIT ARS Industrial outfall 001 and ultimately discharges at the southeastern corner of the base to McClarens Run.

As the T-Ramp will only be used for parking military aircraft, neither the proposed action nor the no action alternative will adversely impact stormwater.

The only notable issue regarding stormwater is that the stormwater inlets on the T-Ramp discharge directly to McClarens Run without passing through oil/water separators. To protect accidental releases or discharges of fuel to these inlets in the event of an accidental spill from parked aircraft during refueling or other

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

operations in this area, the 911 AW implements stormwater best management practices (BMPs) and emergency procedures, as described in their SWPPP (Appendix A, Reference No. 51). Specifically, spill kits and other emergency response equipment are available to contain any accidental fuel or oil leaks from parked aircraft.

In addition, the 911th AW has a Hazardous Material Emergency Planning and Response Plan (HAZMAT Plan), which includes spill prevention and response procedures to meet federal, state, local, and USAF regulatory requirements for spill prevention and contingency planning and to meet SWPPP requirements. The completed HAZMAT Plan addresses prevention of all spills including those that could contact stormwater or flow to stormwater drainage points. The HAZMAT Plan also covers response capabilities and procedures for spills at the station.

Drinking Water Quality: As no drinking water wells are located within or near the T-Ramp, neither the proposed action nor the no action alternative will adversely impact drinking water quality.

The only issue of concern regarding drinking water at the T-Ramp parcel is that an underground 12" DIP potable water main is located along the eastern and northern boundary of the T-Ramp. Although the proposed action does not involve construction at the T-Ramp, this pipe should be protected during any future construction or renovation activities to maintain water supply to the Airport Business Park to the north of the T-Ramp.

Groundwater: As the T-Ramp will only be used for parking military aircraft, neither the proposed action nor the no action alternative will adversely impact groundwater.

Wastewater: As the T-Ramp will only be used for parking military aircraft and no discharge of wastewater occurs from this area, neither the proposed action nor the no action alternative will adversely impact wastewater.

5.9 Biological Resources

The T-Ramp apron is located on the PIT airfield and does not have any areas which have been identified as wetlands or 50- or 100-year flood plains. Therefore, neither wetlands nor flood plains will be adversely impacted by either the proposed action or the no action alternative.

In addition, this predominantly paved area does not support any wildlife. Therefore, there are no known threatened, endangered, or locally rare wildlife species or habitats that will be adversely impacted by either the proposed action or the no action alternative.

In addition, the following agencies reviewed the potential impact of this proposed action:

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

- The U.S. Fish and Wildlife Service responded on March 1, 2012 that “No federally listed species under our jurisdiction is known or likely to occur in the project area” (see Appendix A, Reference no. 48).
- The PA Game Commission responded on February 23, 2012 that “PNDI records indicate species or resources of concern are located in the vicinity of the project. However, based on the information you submitted concerning the nature of the project, the immediate location, and our detailed resource information, the PGC has determined that no impact is likely. Therefore, no future coordination with the PGC will be necessary for this project at this time” (see Appendix A, Reference no. 49).

5.10 Cultural Resources

Because there are no cultural or historical resources identified at the T-Ramp or adjacent properties, neither the proposed action nor the no action alternative has the potential to impact on-site or adjacent cultural resources.

Additionally, because neither the proposed action nor the no action alternative could affect historic properties, the above statement satisfies the 911 AW responsibilities under *Section 106 of the National Historic Preservation Act of 1966*.

In addition, according to the letter received by the PA Historical and Museum Commission on March 16, 2012, the proposed action will have no effect on any identified historic or archaeological resources (see Appendix A, Reference no. 50).

5.11 Socio-economics

Because neither the proposed action nor the no action alternative involves the displacement of residents or businesses, implementation of the federal *Uniform Relocation Assistance and Real Property Acquisition Policies Act* is not required.

Therefore, neither the proposed action nor the no action alternative would adversely impact the socioeconomics of the surrounding population.

5.12 Environmental Justice

As neither the proposed action nor the no action alternative will have any impact on human population, there will not be any disproportional environmental impact on minority or low-income populations.

5.13 Recreational and Visual Resources

As the T-Ramp parcel is a secured, predominantly paved area located on the PIT airfield and there are no recreational or unique visual resources present, there are no adverse impacts to these resources from the proposed action or the no action alternative.

5.14 Transportation

As the T-Ramp parcel is a secured, predominantly paved area located on the PIT airfield and is not accessible for transportation of the general public, there are no adverse impacts to transportation from the proposed action or the no action alternative.

Regarding movement of aircraft, the proposed action will improve the 911 AW's ability to relocate C-130 aircraft for parking purposes during construction activity on the 911 AW aircraft apron. The property also provides additional apron space for the 911 AW for visiting military aircraft, including Air Force One and supporting aircraft. Further, this additional space has proven greatly beneficial for space assistance during periods of construction on the 911 AW, including its current apron renovation project.

5.15 Other

No other issues or resources have been identified during the development of this EA/EBS that would be adversely impacted by either the proposed action or the no action alternative. Comments from other agencies reviewing this proposed action are provided in Appendix K – IICEP Contacts, Letters and Comments.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

[This page intentionally left blank]

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

6. FINDINGS FOR ADJACENT PROPERTIES

CDM Smith conducted a search of available environmental records through Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate. The EDR Reports are listed in Appendix A with the following Reference Numbers:

- (Reference No. 36) "The EDR Radius Map™ Report with GeoCheck®" for the Pittsburgh IAP – 911th Airlift Wing T-RAMP property, Environmental Data Resources Inc., November 14, 2011.
- (Reference No. 37) "The EDR Aerial Photo Decade Package" for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 15, 2011.
- (Reference No. 38) "EDR Building Permit Report" for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 14, 2011.
- (Reference No. 39) "Certified Sanborn Map Report" for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 14, 2011.
- (Reference No. 40) "EDR Historical Topographic Map Report" for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 14, 2011.
- (Reference No. 41) "Vapor Encroachment Screen" for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 17, 2011.

In addition, these documents are included in this EA/EBS document as Appendix G-1 – "Record Search Report."

This section evaluates the potential impact of adjacent and surrounding properties on the T-Ramp. The former PIT Old Terminal Fuel Distribution System and Fuel Farm are not included in this section as they were described in detail in other sections of this document. Also, Section 4.8 Installation Restoration Program describes the environmental cleanup activities associated with the PIT ARS that borders the T-Ramp to the east and south.

6.1 Land Uses

The Pittsburgh International Airport borders the T-Ramp to the north and west. The Pittsburgh IAP ARS borders the T-Ramp to the east and south.

The eastern border of the base is established by the presence of Interstate 376 Business (formerly Business Route 60), a limited access highway. Land use to the east of Interstate 376 Business consists of the Cherrington Corporate Center, a

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

commercial and office complex, a par 3 golf course and low-density residential property.

6.2 Surveyed Properties

As described in the EDR Reports, properties were surveyed within ¼ - 1 mile surrounding the T-Ramp parcel to identify any surrounding properties that may pose environmental risk to the T-Ramp property.

Two surrounding sites were found in EDR's search of available ("reasonably ascertainable") government records either within the search radius around the target property, including National Priority List, Federal DOD records and others (The full list of the databases searched is provided in Appendix A, Reference no. 36). The following sites were identified:

- **THORN RUN CLIFF MINE PARKWAY INT CHG.** This facility is owned by the PA Department of Transportation and is listed as a large quantity generator of hazardous waste. It is located 0.134 miles NE of the site at a lower elevation than the T-Ramp. This site appears to be from the PennDOT Thorn Run interchange project, located across Interstate 376 Business (formerly Business Route 60) to the northeast of the T-Ramp.
- **NUBRITE CHEMICAL CO.** This facility is located 0.255 miles WNW of the T-Ramp in the Airside Business Park. This company was mapped as having a deed restriction on a property in the municipality of Haysville, which is located approximately 3.5 miles northeast of PIT, across the Ohio River.

Neither of these two sites pose a potential environmental risk or adverse impact to the T-Ramp property.

6.3 Potential Environmental Concerns

The primary environmental concern in close proximity to the T-Ramp is the PIT Old Terminal Fuel Distribution System (formerly located to the west), which was described in Section 4.9.3 and through the EBS Phase II Investigation (See Appendix I). CDM Smith team determined through subsurface sampling and analysis of soil and groundwater during the EBS Phase II Investigation (Appendix I) that *"Based on previous documentation, hazardous substances or petroleum products may have previously been released or disposed at or adjacent to the T-Ramp. However, with respect to the RECs assessed, there is no evidence that a release at, or adjacent to, the T-Ramp has significantly impacted the property soil or groundwater."*

Additionally, as described in Section 4.8 Installation Restoration Program, no compliance issues at Pittsburgh IAP ARS are being addressed under the IRP, and none are anticipated to be handled in this manner in the future. More specifically, none of these IRP sites are located within the T-Ramp proposed action area or within close enough proximity to pose a potential environmental concern or adverse impact to the T-Ramp property. No other surrounding properties have

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

been identified that pose a potential environmental risk or adverse impact to the T-Ramp property.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

[This page intentionally left blank]

7. CUMULATIVE EFFECTS OF THE PROPOSED ACTION

This section evaluates the cumulative impacts associated with the implementation of the proposed action and the no action alternative.

7.1 Definition of Cumulative Effects

In 40 CFR part 1508.7, NEPA defines cumulative impacts as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

According to the NEPA Council on Environmental Quality Handbook “Considering Cumulative Effects under the National Environmental Policy Act” (available online at http://ceq.hss.doe.gov/publications/cumulative_effects.html), identifying the major cumulative effects issues of a proposed action involves defining the following:

- The direct and indirect effects of the proposed action,
- Which resources, ecosystems, and human communities are affected, and
- Which effects on these resources are important from a cumulative effects perspective.

7.2 Past, Present, and Reasonably Foreseeable Actions

This EA/EBS evaluates the cumulative effects of the proposed action and no action alternative, while considering the incremental contribution of past, present, and reasonably foreseeable actions.

7.2.1 Past Actions Relevant to the Proposed Action and No Action Alternative

Prior to 1973, the T-Ramp parcel was primarily undeveloped land that served as the approach to former Runway 23 at the former Greater Pittsburgh International Airport. In the late 1970s and early 1980s, Runway 23 was decommissioned and this area was filled and paved as part of the construction of the extension to an existing commuter aircraft apron and parking area. The use of the T-Ramp parcel as a commuter aircraft parking area has essentially remained unchanged since completion of construction around 1985-86. The AFRC and 911 AW have been using the T-Ramp parcel for parking military aircraft since 1993.

Past actions that are most relevant to the T-Ramp are the decommissioning of the former Old Terminal, Fuel Distribution System and the Fuel Farm with the associated environmental cleanup and mitigation.

7.2.2 Present Actions Relevant to the Proposed Action and No Action Alternative

The Pittsburgh IAP ARS is an active military base that requires occasional new construction, facility improvements and infrastructure upgrades. With regard to the T-Ramp, its primary use is to provide space for the 911 AW to relocate C-130 aircraft for parking purposes during construction activity on the primary aircraft apron. The property also provides additional apron space for the 911 AW for visiting military aircraft, including Air Force One and supporting aircraft. Further, this additional space has proven greatly beneficial for space assistance during periods of construction on the 911 AW, including its current apron renovation project.

7.2.3 Reasonably Foreseeable Actions that Interact with the Proposed Action and No Action Alternative

For the foreseeable future, the AFRC and 911 AW intend to continue the current use of the T-Ramp parcel as has been conducted since 1993; to park military aircraft.

However, portions of the pavement and joint sealant of the T-Ramp have been determined to be unsafe for aircraft operation by ACAA. It is reasonably foreseeable that if the proposed action of acquiring the T-Ramp is implemented by the AFRC and 911 AW, that the repair and/or replacement of the T-Ramp pavement and joints would be conducted.

Also, if the no action alternative is implemented and the 911 AW does not lease this parcel, it is reasonably foreseeable that the ACAA would reclaim this area for use by other tenants. In this case, it is also anticipated that pavement and joint repair would still be required. It is also possible that other tenants could erect aircraft hangars, fencing and other support facilities on the T-Ramp. As the T-Ramp is integral to the Air Operations Area of the Pittsburgh International Airport, it is unlikely that the future use of this area would change from its current use, regardless of tenant.

7.3 Cumulative Effects Analysis

The following analysis examines how the impacts of the actions presented above might be affected by those resulting from the proposed action and no action alternative at Pittsburgh IAP ARS, and whether such a relationship would result in potentially significant impacts not identified when the proposed action or no action alternative is considered individually.

- The Pittsburgh IAP ARS is an active military base that requires occasional mission changes, new construction, facility improvements and infrastructure upgrades. These operations have occurred for many years and will continue to occur during and after the proposed action. The acquisition by lease of the T-Ramp and use to park military aircraft (proposed action) is a very “limited scope” action. None of these ancillary, on-base actions are expected to result

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

in more than negligible impacts individually or cumulatively as related to the acquisition of the T-Ramp parcel by lease.

- The proposed action represents status quo conditions and would not represent any change from the existing environment.
- The no action alternative actually poses the most potential to change operations and use of the T-Ramp (as described in the previous section).
- **Only one type of project has been identified that has the potential to produce incremental impacts when added to other past, present, or reasonably feasible future actions:** With either the proposed action or the no action alternative, it is likely that pavement repair or replacement projects will likely be conducted at the T-Ramp to support the safe operation of aircraft on this apron. The repair/replacement could include removal of the airfield pavement to the subbase. Due to historic releases and subsequent environmental cleanups in the vicinity of the former Old Terminal Fuel Distribution System or Fuel Farm area, any subsurface construction projects on the T-Ramp must follow appropriate management of any potentially contaminated soil or groundwater encountered to avoid incremental or significant impacts. However the likelihood of encountering these materials at the T-Ramp is remote based on Phase II EBS soil and groundwater sampling results not exceeding the PA Statewide Health Standards (see Appendix I).

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

[This page intentionally left blank]

8. APPLICABLE REGULATORY COMPLIANCE ISSUES

8.1 Compliance Issues

There are no outstanding issues of regulatory non-compliance associated with the T-Ramp. However, for any future repair or construction of pavement in the T-Ramp area, if during any excavation at PIT, any soil or groundwater is encountered that is suspected to be contaminated based on odors or a visible inspection, the contractor shall follow the ACAA's "Procedures Regarding Encountered Suspect Contamination." However, the likelihood of encountering these materials at the T-Ramp is remote based on Phase II EBS soil and groundwater sampling results not exceeding the PA Statewide Health Standards (see Appendix I).

8.2 Description of Corrective Actions Taken or In Progress

There are no "Corrective Actions Required" as a result of this EA/EBS investigation.

There are no "Corrective Actions In Progress" associated with the T-Ramp.

The "Corrective Actions Taken" associated with the T-Ramp are related to the remediation activities completed by the ACAA for the Old Terminal Fuel Distribution System that was formerly located to the west of the T-Ramp. These corrective actions have been completed in accordance with PA Act 2, resulting in an Act 2 Liability Release and are well described in this EA/EBS. This Liability Release is limited to the six "soil sites," which are all located outside of the T-Ramp boundary to the west. In addition, a Deed Restriction for the Old Terminal Fuel Distribution System was established for these sites (see Appendix L: Deed Restriction for the Old Terminal Fuel Distribution System). Although this Deed Restriction is required only for those "sites" within the Act 2 Liability Release and not required for the T-Ramp, the land use requirements of this Deed Restriction are not onerous and should also be considered for the T-Ramp, including:

- The groundwater at and under the Land shall not be used for any drinking or agricultural purposes,
- The Land shall be used solely for nonresidential purposes; and
- The Grantee shall have a continuing duty to maintain the protective pavement cover and distance between new structures and petroleum contaminated areas on the Land.

Due to the intended use of the T-Ramp as an aircraft parking apron, these land use requirements should be easily achievable by the 911 AW for the T-Ramp parcel.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

[This page intentionally left blank]

9. CONCLUSIONS REGARDING SUITABILITY TO PROCEED WITH THE REAL ESTATE TRANSACTION

9.1 Facility Matrix

A Facility Matrix is developed as part of this EA/EBS to identify each separate area that was investigated in a facility, with the CERCLA Hazardous Substances and other categories that contributed to the Property Category assignment.

In their preliminary EBS for the T-Ramp parcel (see Appendix A, Reference no. 1); the 911 AW classified the entire area containing the T-Ramp as *Category 7 – further evaluation required*. The primary reason for this Category 7 assignment was as a result of the historic soil and groundwater contamination at the Old Terminal Fuel Distribution System, which was formerly located to the west of the T-Ramp. As the T-Ramp is the only area of interest, the Facility Matrix is limited to this single parcel as provided in Table 5.

Table 5: Facility Matrix for T-Ramp

Categories Contributing to Property Category Assignment	Description
Use	Parking for C-130H aircraft
CERCLA Hazardous Substances	Jet A fuel released prior to 1992 from former PIT Old Terminal Fuel Distribution System, located to the west of the T-Ramp
Contaminated Soil	None. Sampling and analysis demonstrated that soil is below PADEP Statewide health, non-residential soil standards for petroleum constituents (Jet A fuel)
Groundwater Quality	None. Sampling and analysis demonstrated that groundwater is below PADEP Statewide health, non-residential, non-use aquifer groundwater standards for petroleum constituents (Jet A fuel)

9.2 Property Categories

Per AFI 32-7066 (“Environmental Baseline Surveys in Real Estate Transactions”), the USAF has defined the following categories regarding the presence of CERCLA hazardous substances [42 U.S.C. § 9601(14)] or petroleum products or their derivatives.

- **Category 1-** *No storage, release or disposal has occurred. Property where no hazardous substances or petroleum products or their derivatives were stored, released into the environment or structures, or disposed on the subject property and where no migration from adjacent areas has occurred.*

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

- **Category 2** - Only storage has occurred. Property where hazardous or petroleum products or their derivatives were stored, but no release, disposal or migration from adjacent areas occurred.
- **Category 3**- Contamination below level that require any action. Property where contamination is present but falls below established action levels. For Air Force controlled property, base this conclusion on a characterization pursuant to the IRP. For non-Air Force controlled property, base this conclusion on an equivalent level of evaluation that includes sampling and laboratory analysis.
- **Category 4**- Remedial action required and taken. Property where contamination above action levels existed but all remedial actions necessary to protect human health and the environment have been taken to meet the provisions of CERCLA Section 120 (h) (3).
- **Category 5**- Remedial or other action underway. Property is undergoing remedial action for known contamination. Remedial systems are partially or entirely in-place, but have not been fully demonstrated.
- **Category 6**- Required response action not implemented. Property contains known contamination and required remedial systems or other actions have not been selected or implemented.
- **Category 7**- Further evaluation required. If the existence of contamination or potential for a release of hazardous substances into the environment or structures is indicated, but not well characterized then further evaluation is required. Property which is not well characterized includes Air Force controlled property which has not yet been further characterized pursuant to the IRP. Conduct further evaluation before making a recommendation on whether to proceed with the transaction. (See AFI 32-7066 section 2.2. for procedures for further evaluation).

As previously stated, the T-Ramp area was classified as “Category 7” in the 1996 EBS. As a result of the current EA/EBS investigation, it is recommended that T-Ramp parcel be re-classified as **Category 4: Remedial Action Required and Taken**. This category applies to areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products have occurred, and all remedial actions necessary to protect human health and the environment have been taken.

This parcel should be classified as Category 4 for the following reasons:

- Prior to 1992, the PIT Old Terminal Fuel Distribution System contributed to subsurface soil contamination from Jet A fuel near the western boundary of the T-Ramp as described in Section 2.1.1 of this EA/EBS. After conducting site characterization and remediation of the source of contamination, the ACAA demonstrated attainment for soil and groundwater. In addition, stormwater sampling demonstrated that petroleum contaminants did not

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

impact perched water or surface water bodies. No further action was required and a release of liability for the six soil "sites" was secured from PADEP. A Deed Restriction was also secured for these six remediation sites (See Appendix L). The 911 AW started using the adjacent T-Ramp property under the current MOA in 1993.

- The "EBS Phase II Investigation" (see Appendix I) conducted during this EA/EBS indicates that subsurface petroleum constituent concentrations at the T-Ramp did not exceed the non-residential PADEP Statewide Health Standards for soil or the non-residential, non-use aquifer PADEP Statewide Health Standards for groundwater. This confirms that all remedial actions necessary to protect human health and the environment have been taken due to the historic release and migration of hazardous substances or petroleum products that occurred (i.e., Jet A fuel) at the adjacent Fuel Distribution System area,
- No other sources of contamination were identified during the EBS Phase II that impacted the T-Ramp area.

9.3 Natural Resource Maps

Resource Maps and Figures are provided in Appendix E.

9.4 Data Gaps

One data gap that exists is that the final survey and legal description of the T-Ramp property have not yet been finalized with ACAA. Only minor changes to the T-Ramp boundaries, if any, are anticipated. Any minor changes to these boundaries will not change the conclusions of this EA/EBS.

Therefore, no data gaps were identified during the development of this EA/EBS that would change the conclusions regarding the impact of the proposed action and no action alternative.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

[This page intentionally left blank]

10. RECOMMENDATIONS REGARDING PROCEEDING WITH THE REAL ESTATE TRANSACTION

Per *AFI 32-7066* (“Environmental Baseline Surveys in Real Estate Transactions”), any disposal by deed of property owned by the Federal government on which any hazardous substance was stored for one year or more, known to have been released, or disposed of is subject to the requirements of *Section 120(h)(3)* of CERCLA.

The intent of this EA/EBS report is to make the following types of recommendations based on the conclusions related to the presence of hazardous substances or petroleum products or their derivatives:

- **Proceed with any planned transaction if the property falls in Categories 1 - 4.**
- **Proceed with any planned transaction excluding those portions of the property falling in Categories 5 - 7.**
- **Do not proceed with a disposal or other disposition by deed if property falls in Categories 5 - 6.** Advise whether the Air Force should proceed with a transaction involving a temporary interest.
- **Do not proceed with acquisition of a permanent interest if property falls in Categories 5 - 6 unless Air Force remedial action necessitates the transaction or other unusual circumstances exist.** Advise whether the Air Force should proceed with a transaction involving a temporary interest in the property.
- **Do not proceed with any planned transaction if property falls in Category 7.** Advise that the property cannot be classified into one of the other categories without further evaluation. Include a cost and time estimate for conducting further evaluation.

Since this EA/EBS recommends the reclassification of the T-Ramp parcel as “Category 4,” it also recommends that the AFRC and 911 AW proceed with the planned transaction to acquire the T-Ramp property by lease from the Allegheny County Airport Authority.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

[This page intentionally left blank]

11. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

NEPA requires that environmental analysis include identification of “...*any irreversible and irretrievable commitments of resources; which would be involved in the proposed action should it be implemented.*” Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that the uses of these resources have on future generations. Irreversible effects primarily result from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural site).

If the proposed action is implemented, aircraft operations on the T-Ramp would continue the existing consumption of non-renewable resources such as jet fuel used in aircraft and diesel/gasoline used in vehicles. However, whether the T-Ramp is leased or not, the total number of C-130H aircraft and other vehicles used on the Pittsburgh IAP ARS are not expected to change, thus resulting in no increase or decrease in fuel use. Therefore, these uses are expected to have a negligible impact on irreversible and irretrievable resource commitments.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

[This page intentionally left blank]

12. CONCLUSIONS AND RECOMMENDATIONS

Finding of No Significant Impact (FONSI) Recommended

Based on the analysis of the EA/EBS conducted in accordance with the requirements of the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations, Air Force Environmental Impact Analysis Process (32 CFR 989), and Air Force Instruction (AFI) 32-7061, and after careful review of the potential impacts, we conclude that implementation of the proposed action at Pittsburgh IAP ARS would not result in significant impacts on the quality of the human or natural environment.

Therefore, a Finding of No Significant Impact (FONSI) is warranted and an Environmental Impact Statement is not required for the proposed action.

Finding of No Practicable Alternative (FONPA) Recommended

As required by Air Force guidance AFI 32-7064 - *Integrated Natural Resources Management*, prior to any construction activity in a wetland area (as defined by E. O. 11990), proponents must first prepare a Finding of No Practicable Alternative (FONPA), which documents that there are no practicable alternatives to such construction, and that the proposed action includes all practicable measures to minimize harm to wetlands.

As described in Section 3.2 of this EA/EBS, the following Alternatives were identified in addition to the Proposed Action:

- **No-Action Alternative:** The 911 AW does not acquire the T-Ramp property by lease.
- **Alternative 1:** Continue to extend MOA annually.
- **Alternative 2:** Lease less than the approximately 26 acres of space at the T-Ramp.
- **Alternative 3:** Consider other contiguous locations that satisfy purpose and need of this action.
- **Alternative 4:** Consider other non-contiguous locations that satisfy purpose and need of this action.

Based on the analysis of this EA/EBS, neither the Proposed Action, any of the alternatives, nor the no action alternative was located within or would impact a wetland area. Therefore, a Finding of No Practicable Alternative (FONPA) is not required nor warranted for the proposed action.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

[This page intentionally left blank]

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

APPENDICES

Appendix A: References

Appendix B: Terms

Appendix C: List of Preparers

Appendix D: Persons and Agencies Contacted

Appendix E: Maps and Aerial Photographs

Appendix F: Site Photos

Appendix G: Site Inspection Documents

App G-1: Records Search Report

App G-2: Interview Reports

App G-3: Visual Site Inspection Forms

App G-4: Hazardous Materials Inventory

Appendix H: Certifications

Appendix I: EBS Phase II Investigation (Format in accordance with Section 11
of ASTM E1903-97)

Appendix J: General Conformity

Appendix K: IICEP Contacts, Letters and Comments

Appendix L: Deed Restriction for the Old Terminal Fuel Distribution System

Appendix M: Notice of Availability and Proof of Publication

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

[This page intentionally left blank]

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix A: References

1. “Environmental Baseline Survey Report for additional acreage from Allegheny County”, 911 AW/CE, Pittsburgh International Airport ARS, 5 July 1996.
2. “Cleanup Plan, Pittsburgh International Airport, Old Terminal, Fuel Distribution System”, Prepared for the Allegheny County Department of Aviation by CDM, January 1997.
3. “Final Report (including Appendices A through G), Pittsburgh International Airport, Old Terminal, Fuel Farm Area”, Prepared for the Allegheny County Airport Authority by CDM, August 2003.
4. “Final Report - Statewide Health Standard Checklist and Final Report Summary, Pittsburgh International Airport, Old Terminal, Fuel Farm Area”, Prepared for the Allegheny County Airport Authority by CDM, August 2003.
5. “Final Report, Pittsburgh International Airport, Old Terminal, Fuel Distribution Area”, Prepared for the Allegheny County Airport Authority by CDM, September 2003.
6. “Final Report Addendum, Pittsburgh International Airport, Old Terminal, Fuel Distribution Area”, Prepared for the Allegheny County Airport Authority by CDM, January 2004.
7. “Final Report - Statewide Health Standard Checklist and Final Report Summary, Pittsburgh International Airport, Old Terminal, Fuel Distribution Area”, Prepared for the Allegheny County Airport Authority by CDM, September 2003.
8. “Noise Exposure Maps Update”, Pittsburgh International Airport, Summer 2006.
9. “Noise Assessment, United States Air Force Lockheed C-130, North Operations Tactical Patterns, Pittsburgh International Airport, Pittsburgh, Pennsylvania”, Prepared for the Allegheny County Airport Authority by Michael Baker, Inc., September 2007.
10. “Non-Use Aquifer Determination, Pittsburgh International Airport, Old Terminal, Fuel Distribution System and Fuel Farm Areas”, Prepared for the Allegheny County Department of Aviation by CDM, November 1999.
11. “Fuel Hydrant System Site Investigation Report, Pittsburgh International Airport, Old Terminal”, Prepared for the Allegheny County Department of Aviation by CDM, June 30, 1993.
12. “Specifications for the Decommissioning of the Fuel Farm System and Auxiliaries and Remediation of the Soil at the Old Greater Pittsburgh International Airport, Fuel Distribution System Soil Remediation”, Prepared for the Allegheny County Department of Aviation by CDM, April 1997.
13. “Site Characterization and Remedial Action Report for the Jet Fuel Storage Area”, Prepared for the Allegheny County Department of Aviation by BAKER/TSA, Inc., December 1990.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix A: References

14. “Hydrogeological Study, Pittsburgh International Airport, Old Terminal, Fuel Distribution System”, Prepared for the Allegheny County Department of Aviation by CDM, June 1996.
15. “Remedial Action Plan, Pittsburgh International Airport, Old Terminal, Fuel Farm Area”, Prepared for the Allegheny County Department of Aviation by CDM, August 1998.
16. “Jet Fuel Distribution System Site Investigation Work Plan, Phase IB – West Dock, Pittsburgh International Airport, Old Terminal”, Prepared for the Allegheny County Department of Aviation by CDM, August 1994.
17. “Phase IB Investigation Summary Report, East, South, Southeast and West Docks, Pittsburgh International Airport, Old Terminal”, Prepared for the Allegheny County Department of Aviation by CDM, November 1995.
18. “Site Characterization Report, Pittsburgh International Airport, Old Terminal, Fuel Farm Area”, Prepared for the Allegheny County Department of Aviation by CDM, March 1997.
19. “Site Characterization Report – Appendix M, Pittsburgh International Airport, Old Terminal, Fuel Farm Area”, Prepared for the Allegheny County Department of Aviation by CDM, April 1997.
20. “Remedial Investigation/Feasibility Study, Former Drum Storage Area at Building 408, Draft Work Plan”, Prepared for Pittsburgh International Airport Air Reserve Station by Montgomery Watson, March 1997.
21. “Former Drum Storage Area at Building 408, Final Monitoring Well Abandonment Report”, Prepared for Pittsburgh Air Reserve Station by Montgomery Watson Harza, June 2002.
22. “Site Soil Assessment Summary Report, Former POL Area”, Prepared for Pittsburgh International Airport Air Reserve Station by Montgomery Watson, May 1998.
23. “Well Abandonment Report, Pittsburgh International Airport Air Reserve Station”, Prepared for Air Force Reserve Command by Tetra Tech EM, Inc., February 2001.
24. “Final Remedial Action Plan, Site ST-06 POL Area”, Prepared for Pittsburgh Air Reserve Station by Montgomery Watson, August 1998.
25. “Soil Borings/Monitoring Well Report, POL Site Remedial Investigation, Project GP 92-008”, Prepared for U.S. Air Force 911th Airlift Group by L. Robert Kimball & Associates, November 1993.
26. “Facility ID No. 02-81147, Old POL Site, Tank Closure Documentation”, Prepared for 911th Airlift Wing by Neumeyer Environmental Services, Inc.,

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix A: References

27. “Final Environmental Assessment Technical Report for Action to the Old Terminal Building and Development of the Airside Business Park with Final DOT 4(f) Evaluation Appended”, Michael Baker Jr. Inc., January 1999.
28. “General Plan – Pittsburgh IAP Air Reserve Station”, US Air Force 911th Air Lift Wing, December 1998.
29. “Acceptance Letter – Final Report Under the Statewide Health Standards, Former Drum Storage Area at Building 408 (SS-01)”, Pennsylvania Department of Environmental Protection, October 1999.
30. “Environmental Investigation Report, Proposed Jet Fuel Facility Site”, Prepared for United States Army Corps of Engineers Baltimore District by Burns & McDonnell, March 1994.
31. “Installation Restoration Program, Phase I Record Search”, Prepared for United States Air Force Reserve by Roy F. Weston, Inc., December 1984.
32. “Site Characterization Report, 911th Airlift Wing/CE, Building 322, Pittsburgh International Airport ARS”, Prepared for 911th Airlift Wing/CE by Environmental & Geological Consultants, Inc., April 1996.
33. “Former Civil Engineering Rubble Landfill (LF-03), Decision Document”, Prepared for Pittsburgh Air Reserve Station by Montgomery Watson, November 1998.
34. “Site ST-06 Former POL Area, Remedial Action Completion Report”, Prepared for Pittsburgh International Airport Air Reserve Station by Montgomery Watson Harz, February 2002.
35. “Former Drum Storage Area at Building 408 (SS-01), Final Report Under the Statewide Health Standard”, Prepared for Pittsburgh International Airport Air Reserve Station by Montgomery Watson, May 1998.
36. “The EDR Radius Map™ Report with GeoCheck®” for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 14, 2011.
37. “The EDR Aerial Photo Decade Package” for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 15, 2011.
38. “EDR Building Permit Report” for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 14, 2011.
39. “Certified Sanborn Map Report” for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 14, 2011.
40. “EDR Historical Topographic Map Report” for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 14, 2011.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix A: References

41. “Vapor Encroachment Screen” for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 17, 2011.
42. “Memorandum of Agreement Between Allegheny County and the United States Air Force Reserve”, February 3, 1993.
43. “Guidance for Performing Site Inspections under CERCLA”, Interim Final, USEPA/540-R-92-021, PB92-963375, September 1992.
44. “Air Quality Annual Report for 2010 with 1990-2010 Trends”, Allegheny County Health Department, 2010.
45. “Management Action Plan – Pittsburgh International Airport Air Reserve Station”, prepared by Montgomery Watson, February 2000.
46. “CERCLA Administrative Record for IRP Activities at 911 Airlift Wing Air Reserve Station”, Revised January 2003.
47. “Web Soil Survey for T-Ramp property”, United States Department of Agriculture.
48. “Letter response to DOPAA from Mr. Clint Riley, U.S. Fish and Wildlife Service, to Mr. Daniel DePra, CDM Smith”, dated March 1, 2012.
49. “Letter response to DOPAA from Ms. Tracey Librandi Mumma, Pennsylvania Game Commission, to Mr. Daniel DePra, CDM Smith”, dated February 23, 2012.
50. “Letter response to DOPAA from Mr. Douglas C. McLearen, Pennsylvania Historical and Museum Commission, to Mr. Daniel DePra, CDM Smith”, dated March 16, 2012.
51. “Stormwater Pollution Prevention Plan”, Pittsburgh Air Reserve Station, Pittsburgh, PA, September 2011.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix B: Terms

911 AW	911th Airlift Wing
ACAA	Allegheny County Airport Authority
ACHD	Allegheny County Health Department
ACM	Asbestos containing material
AFI	Air Force Instruction
AFM	Air Force Manual
AFRC	Air Force Reserve Command
AFPAM	Air Force Pamphlet
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
AW	Airlift Wing
BASH	Bird Air Strike Hazard
BFI	Browning-Ferris Industries (landfill company)
bgs	Below ground surface
BMP	Best Management Practice
CASRN	Chemical Abstract Services Registry Number
CD	Compact Disc
CDM	Camp Dresser & McKee Inc.
CDM Smith	CDM Smith Inc. (formerly Camp Dresser & McKee Inc.)
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
Certs	Certifications
CFR	Code of Federal Regulations
CO	Carbon monoxide
COC	Chain of custody
COR	Contracting Officers Representative
DAP	ACAA Deicing Action Plan
DDESB	Department of Defense Explosives Safety Board
DI	Deionized (water)
DIP	Ductile iron pipe
DNL	Day/Night average sound level
DO	Dissolved oxygen
DOD	Department of Defense
DOPAA	Description of Proposed Actions and Alternatives

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix B: Terms

DOT	Department of Transportation
DRMO	Defense Reutilization and Marketing Office
DRMS	Defense Reutilization and Marketing Service
EA	Environmental Assessment
EBS	Environmental Baseline Survey
ECAS	Environmental Compliance and Assessment System
EDB	ethyl dibromide
EDD	Electronic data deliverables
EDR	Environmental Data Resources
EF	Environmental Firm
EIAP	Environmental Impact Analysis Process
EPA	Environmental Protection Agency
ESP	Explosives Site Plan
ESRI	Environmental Systems Research Institute
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FGDC	Federal Geographic Data Committee
FOD	Foreign Object Debris
FONPA	Finding of No Practical Alternative
FONSI	Finding of No Significant Impact
GEO	Geo-Environmental Drilling Co., Inc.
GFM	Government Furnished Material
GIS	Geographical Information System
GPIA	Greater Pittsburgh International Airport (or PIT)
GW	Groundwater
HAZMAT	Hazardous Materials
HNO ₃	Nitric Acid
HQ	Headquarters
HSA	Hollow stem auger
ICE	I.C.E. Service Group, Inc.
IAP ARS	Pittsburgh International Airport Air Reserve Station
IDW	Investigation derived waste
IICEP	Interagency Coordination for Environmental Planning
IRAA	Indoor Radon Abatement Act of 1988
IRP	Installation Restoration Program

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix B: Terms

JP-8	Jet fuel used by the 911 AW
LBP	Lead based paint
MAP	Management Action Plan
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSA	Metropolitan Statistical Area
MS/MSD	Matrix spike/matrix spike duplicate
MSL	Mean sea level
MXD	Map Exchange Document
NAAQS	National Ambient Air Quality Standards
NAD83	North American Datum of 1983
NAGPRA	Native American Graves Protection and Repatriation Act
NCP	Noise Compatibility Program
NEM	Noise Exposure Map
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NO ₂	Nitrogen dioxide
NOA	Notice of Availability
NOI	Notice of Intent
NPL	National Priorities List
NTP	Notice to Proceed
NTU	Nephelometric turbidity unit
O ₃	Ozone
ORP	oxidation-reduction potential
OWS	Oil Water Separator
PA	Pennsylvania
PADEP	Pennsylvania Department of Environmental Protection
Pb	Lead
PCB	Polychlorinated Biphenyls
pCi/L	picocuries per liter
PennDOT	Pennsylvania Department of Transportation
PGC	Pennsylvania Game Commission
PHC-DRO	Petroleum Hydrocarbons-Diesel Range Organics
PID	Photoionization detector

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix B: Terms

PIT	Pittsburgh International Airport (airport code)
PM ₁₀	particulate matter
PNDI	Pennsylvania Natural Heritage Program
POL	Petroleum, Oils and Lubricants
POTW	Publically Owned Treatment Works
ppm	Parts per million
PVC	Polyvinyl chloride
QA	Quality Assurance
QC	Quality Control
Q/D	explosive safety quantity distance zones
RCRA	Resource Conservation and Recovery Act
RCP	Reinforced concrete pipe
REC	Recognized Environmental Conditions
RHĒA	RhĒa Engineers & Consultants, Inc.
RI	Remedial Investigation
ROD	Record of Decision
S	solid/soil identification for sample numbering
SDSFIE	Spatial Data Standards for Facilities, Infrastructure, and Environment
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
SOW	Statement of Work
SPT	Standard penetration testing
SSPOC	Single State Point of Contact
SWMP	Solid Waste Management Plan
SWPPP	Stormwater Pollution Prevention Plan
TCL	Target compound list
TSD	Treatment Storage and Disposal
UN	United Nations
US	United States
USAF	United States Air Force
USAIR	U.S. Airways
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOA	Volatile Organic Analysis

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix B: Terms

VOC	Volatile organic compounds
WPA	Works Progress Administration
YSI	YSI Incorporated – manufacturer of instruments

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix C: List of Preparers

In addition to 911AW staff, CDM Smith Inc. (CDM Smith) was the primary preparer of this report with support from our subconsultant, Rhēa Engineers & Consultants, Inc. (Rhēa). The consultant team is identified throughout this document as “CDM Team” with primary staff including:

Daniel J. DePra, P.E., BCEE
Project Manager
CDM Smith Inc.
503 Martindale Street, Suite 500
Pittsburgh, PA 15212
(412) 201-5500

Matthew R. Sickles, P.E.
Vice President
CDM Smith Inc.
503 Martindale Street, Suite 500
Pittsburgh, PA 15212
(412) 201-5500

Marcella G. Johnson, P.E.
President
Rhēa Engineers & Consultants, Inc.
4975 William Flynn Highway, Suite 14
Gibsonia, PA 15044
(724) 443-4111

Erica L.S. DeLattre, P.E.
Technical Project Manager
Rhēa Engineers & Consultants, Inc.
4975 William Flynn Highway, Suite 14
Gibsonia, PA 15044

Jason T McCabe
Rhēa Engineers & Consultants, Inc.
4975 William Flynn Highway, Suite 14
Gibsonia, PA 15044

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix D: Persons and Agencies Contacted

In addition to 911 AW staff, the following persons and agencies were contacted in preparation of this EA/EBS:

Allegheny County Airport Authority – Property Owner

Mr. Richard C. Belotti
Director, Planning and Environmental Affairs
Allegheny County Airport Authority
Pittsburgh International Airport
Landside Terminal, 4th Floor Mezzanine
PO Box 12370
Pittsburgh, PA 15231
Phone (412) 472-3545

Mr. Kevin A. Gurchak
Manager of Environmental Compliance
Allegheny County Airport Authority
Pittsburgh International Airport
Landside Terminal, 4th Floor Mezzanine
PO Box 12370
Pittsburgh, PA 15231
Phone (412) 472-3575

Pennsylvania Department of Environmental Protection (File Review Contact)

Mr. Ed Duval
Records Office
PADEP Southwest Regional Office
Pennsylvania Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222
(412) 442-4000

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix E: Maps and Aerial Photographs

The following Figures are included in this Appendix:

Figure 1 is the site location map.

Figure 2 is the EA/EBS Sampling Plan location map.

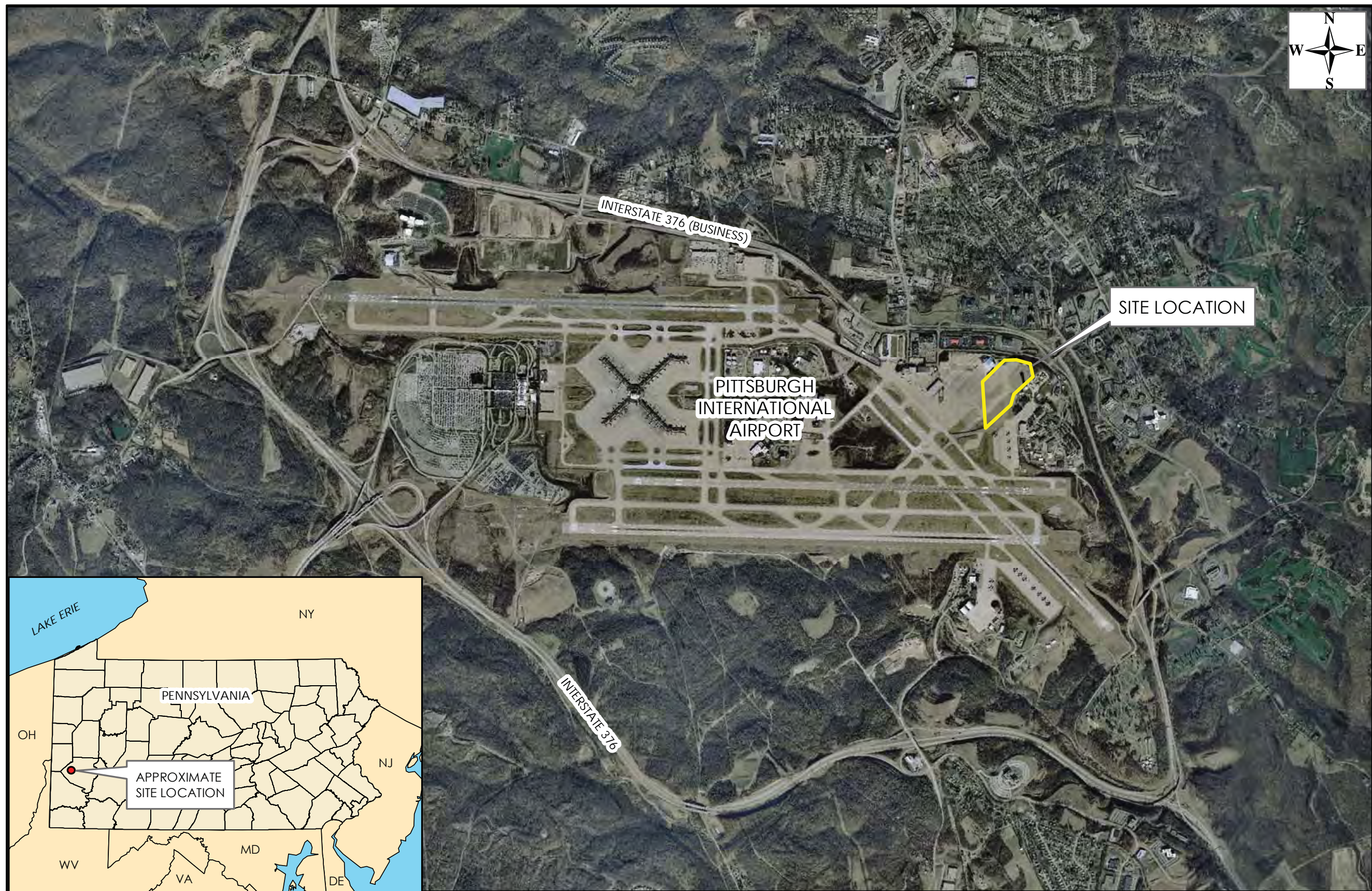
Figure 3 is the site plan of the proposed T-Ramp property in relation to the 911 AW lease boundary and former Old Terminal Fuel Distribution System. This includes approximate locations of subsurface utilities.

Figure 4 is the Old Terminal Fuel Distribution System Remediation Site Plan.

Figure 5 is the Pittsburgh IAP ARS – IRP sites (from IRP)

Figure 6 is the Stormwater System and Tanks

Figure 7 is the Allegheny County Airport Authority, Environmental and Infrastructure Mapping – Streams and Wetlands (prepared by Michael Baker Jr., Inc. for ACAA)



Legend

- Approximate Site Location
- Project Boundary

CDM/546/R2

**CDM
Smith**

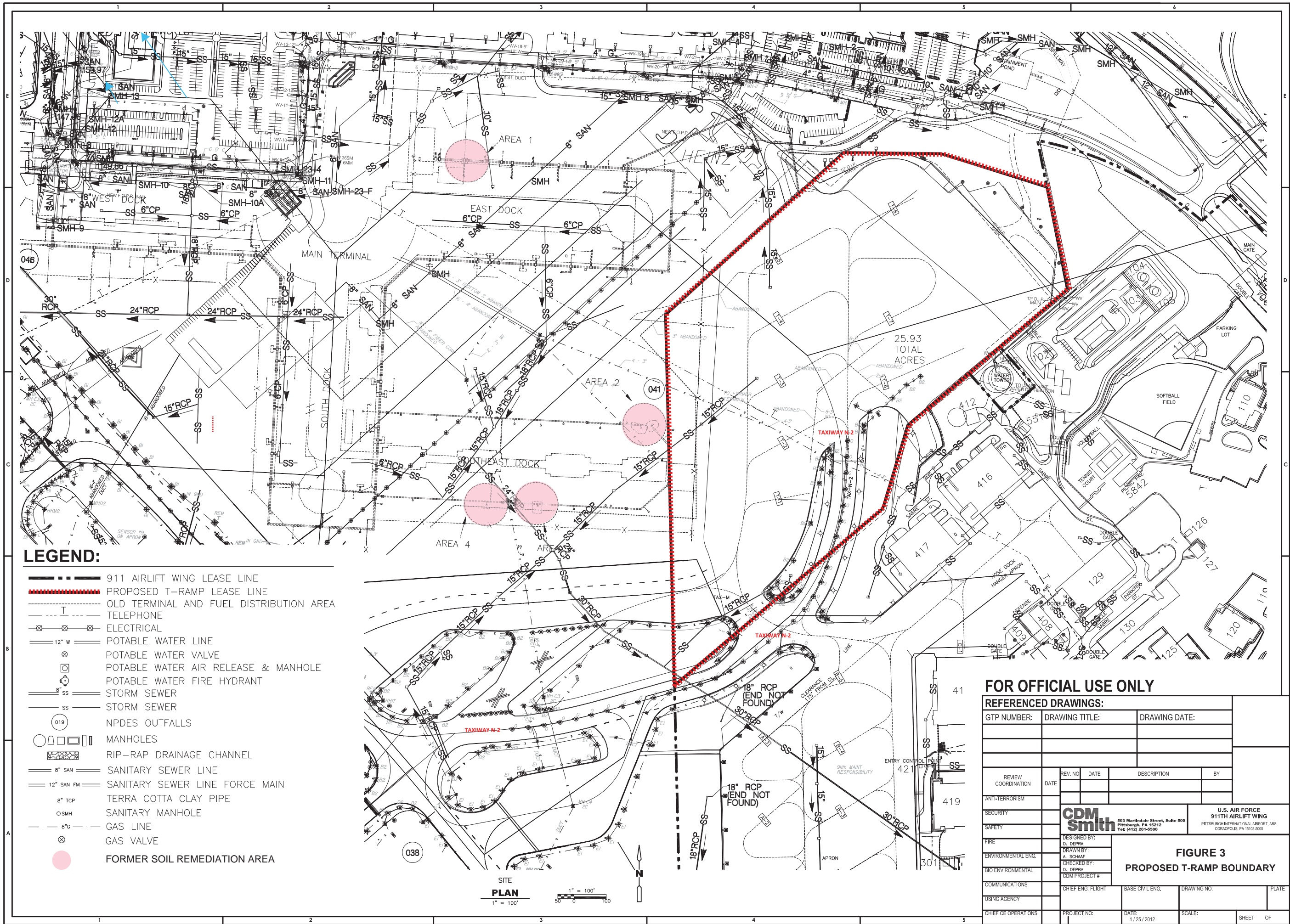
**10
RHEA**
ENGINEERS & CONSULTANTS, INC.

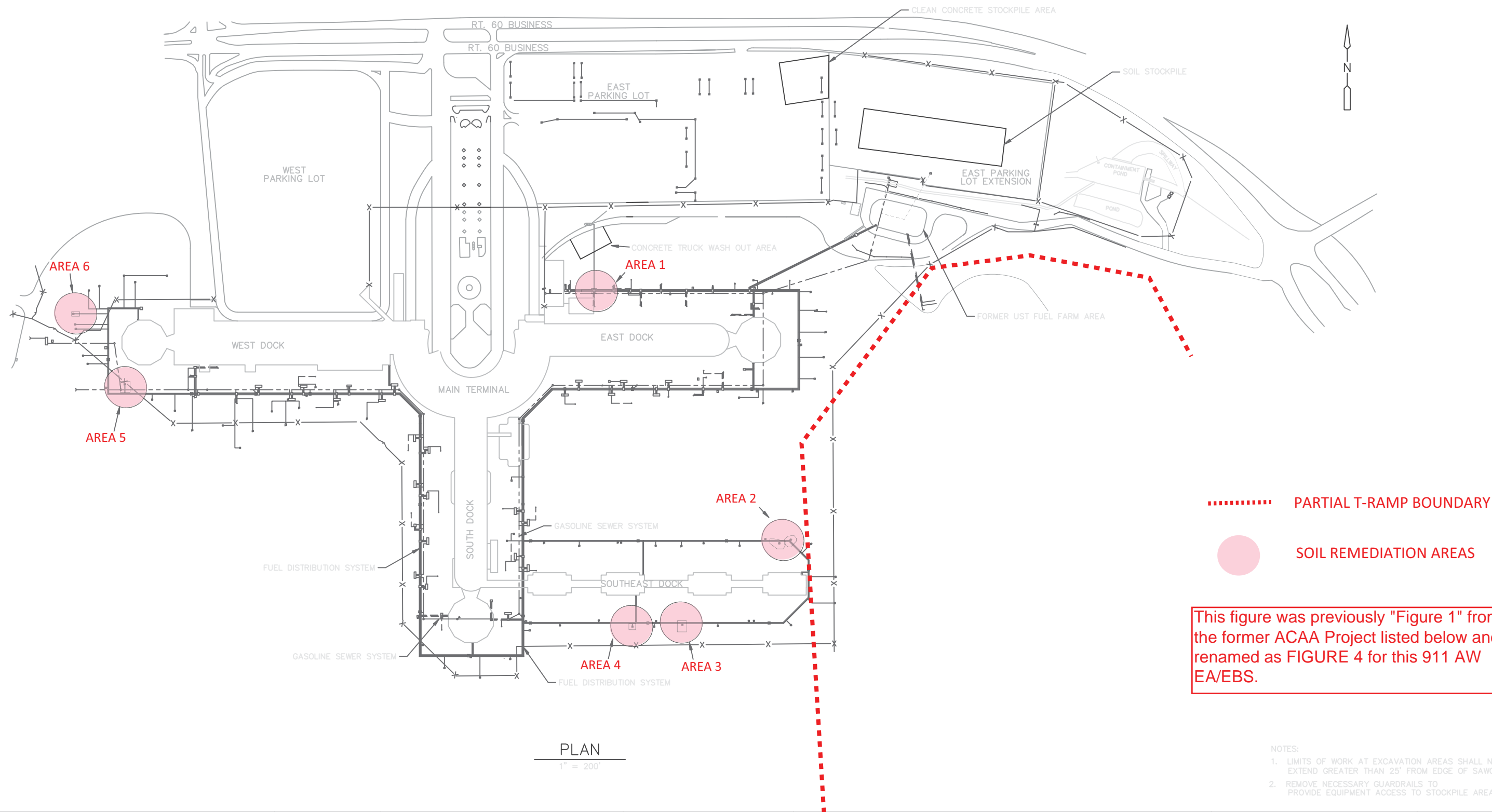
0 0.25 0.5 1 Miles

FIGURE No. 1

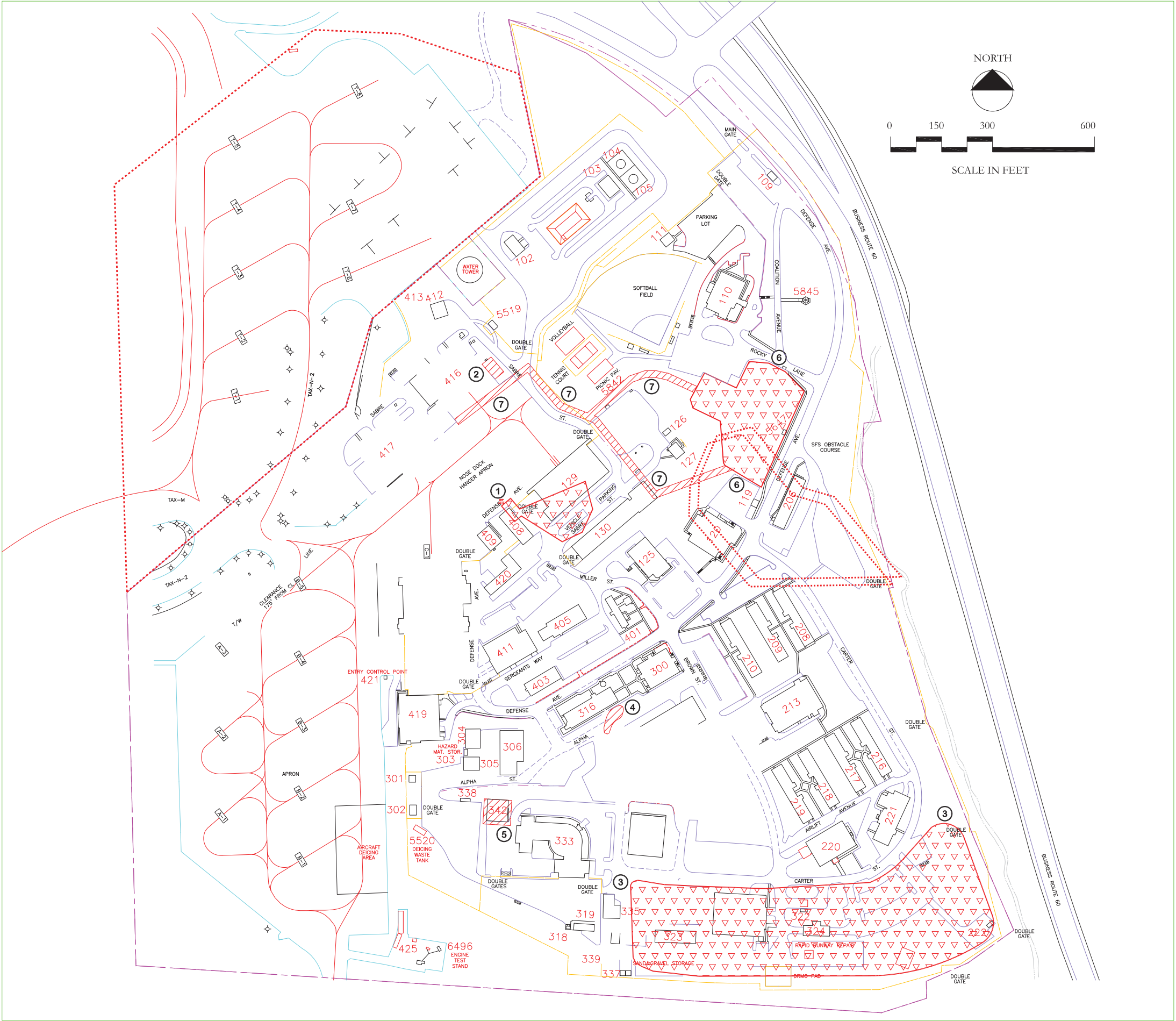
**Site Location Map
T-Ramp EBS for 911th Airlift Wing
Pittsburgh IAP Air Reserve Station**

Drawn By	Checked By	Date	Project	Sheet No.
ZDW	JTM	5/7/12	546	1





					DESIGNED BY: A. DOWNIE DRAWN BY: T. PASTOR SHEET CHK'D BY: A. DOWNIE CROSS CHK'D BY: M. SICKLES APPROVED BY: R. JOEL DATE: APRIL 1997		CAMP DRESSER & McKEE INC.		ALLEGHENY COUNTY DEPARTMENT OF AVIATION PITTSBURGH INTERNATIONAL AIRPORT, OLD TERMINAL FUEL DISTRIBUTION SYSTEM SOIL REMEDIATION PROJECT NO. 10G1-92		PROJECT NO. 5366-010 FILE NAME: CSTPL006
REV. NO.	DATE	DRWN	CHKD	REMARKS			environmental engineers, scientists, planners, & management consultants				FIGURE 4



INSTALLATION RESTORATION PROGRAM (IRP) SITE STATUS

 Proposed T-Ramp Boundary

Site No.	Description	Environmental Condition of Property
1	Bldg 408 Drum Storage Area (SS-01)	Non-Residential Use Only
2	Bldg 416 Drum Storage Area (SS-02)	No Further Action Site
3	Civil Eng. Rubble Landfill (LF-03)	Non-Residential Use Only
4	Bldg 316 Fuel Line Break (ST-04)	No Further Action Site
5	Bldg 342 PCB Storage Area (SS-05)	No Further Action Site
6	POL Area (ST-06)	Non-Residential Use Only
7	Former UG Fuel Hydrant Sys. (PL-07)	No Further Action Site

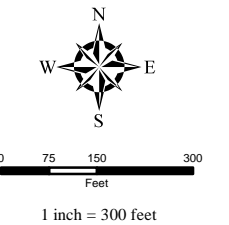
Notes:

 No Further Action Sited - These areas have had comprehensive investigations and contamination does not pose a risk to human health or the environment. For these sites, no further action (NFA) documents have been prepared. In accordance with Air Force Policy, this site is always considered an IRP site. Therefore, any one performing excavation in this location must be notified that this site was identified as having potential contamination, but investigation revealed no contamination. However there is the potential to encounter contamination that was not identified during investigation. Should any contamination be encountered, excavation should stop, contaminated soils should be segregated from clean soils and no further work should be done until guidance on how to proceed in the area is provided by the environmental office. The environmental office will need to contact Pennsylvania Department of Environmental Protection to notify them of the contamination found and determine with them proper procedures to address.

 Non Residential Use Only - These sites where investigated and determined to have contamination and may only be used for non-residential applications. Any excavation in this area must be performed in accordance with environmental regulations, including but not limited to a site specific health and safety plan. Excavated materials must be sampled and disposed of in accordance with environmental regulations as determined by the sampling results. Site specific information regarding contamination and future use of sites can be found in the IRP investigation and future use of sites can be found in the IRP investigation reports found in Civil Engineering.



- Legend
- ABOVEGROUND STORAGE TANK
 - UNDERGROUND STORAGE TANK
 - OIL/WATER SEPARATOR
 - STORMWATER INLET
 - STORMWATER MANHOLE
 - CAP
 - CLEANOUT
 - OUTFALL
 - MAIN LINE
 - SERVICE LINE
 - ABANDONED LINE
 - FENCE LINE
 - WALL LINE
 - INSTALLATION BOUNDARY
 - T-RAMP BOUNDARY
 - FACILITY



For Official Use Only
Not for redistribution

G.3 Stormwater System and Tanks

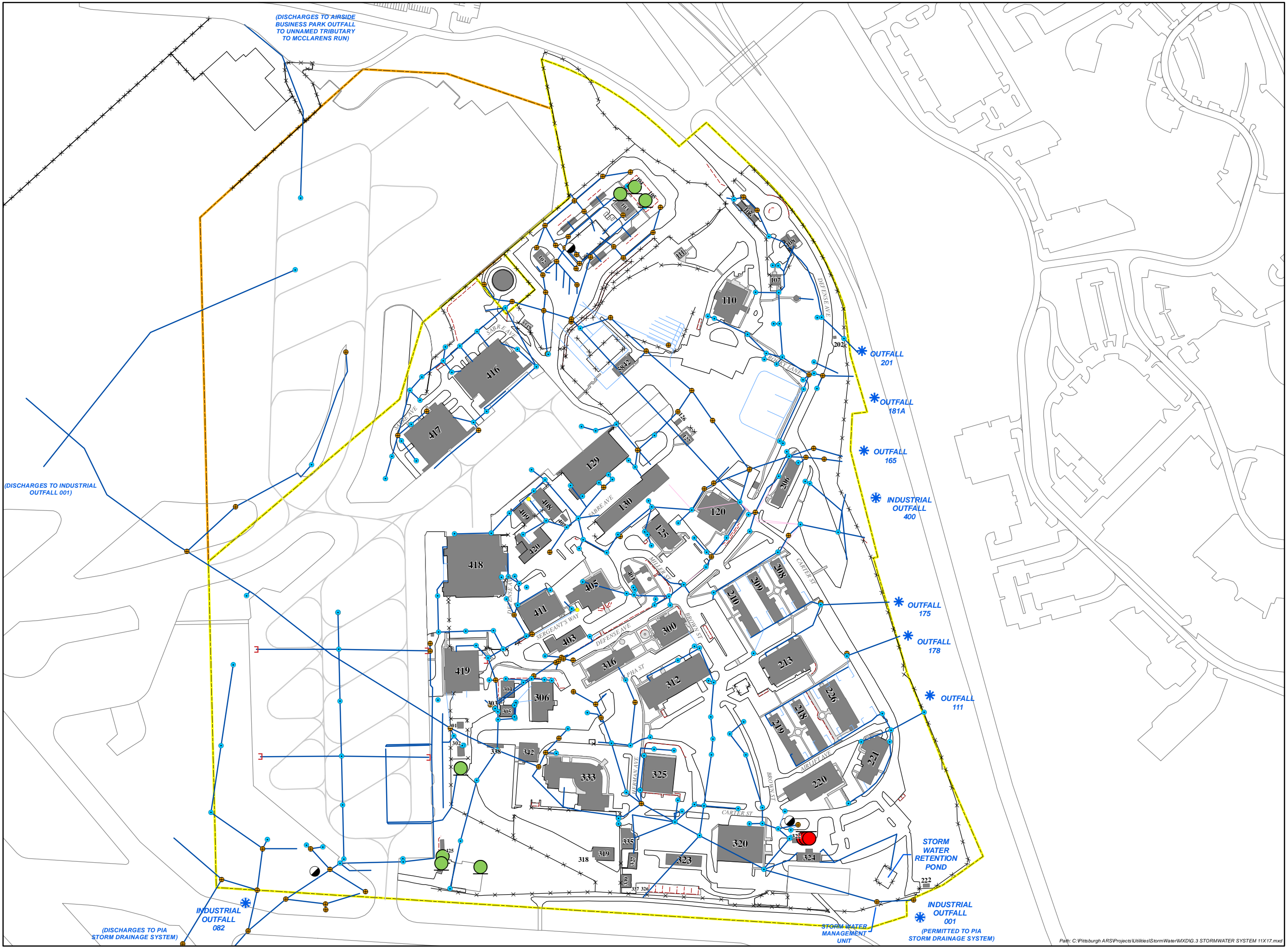
91st Airlift Wing
Pittsburgh Air Reserve Station General Plan

Date: 7/17/2012

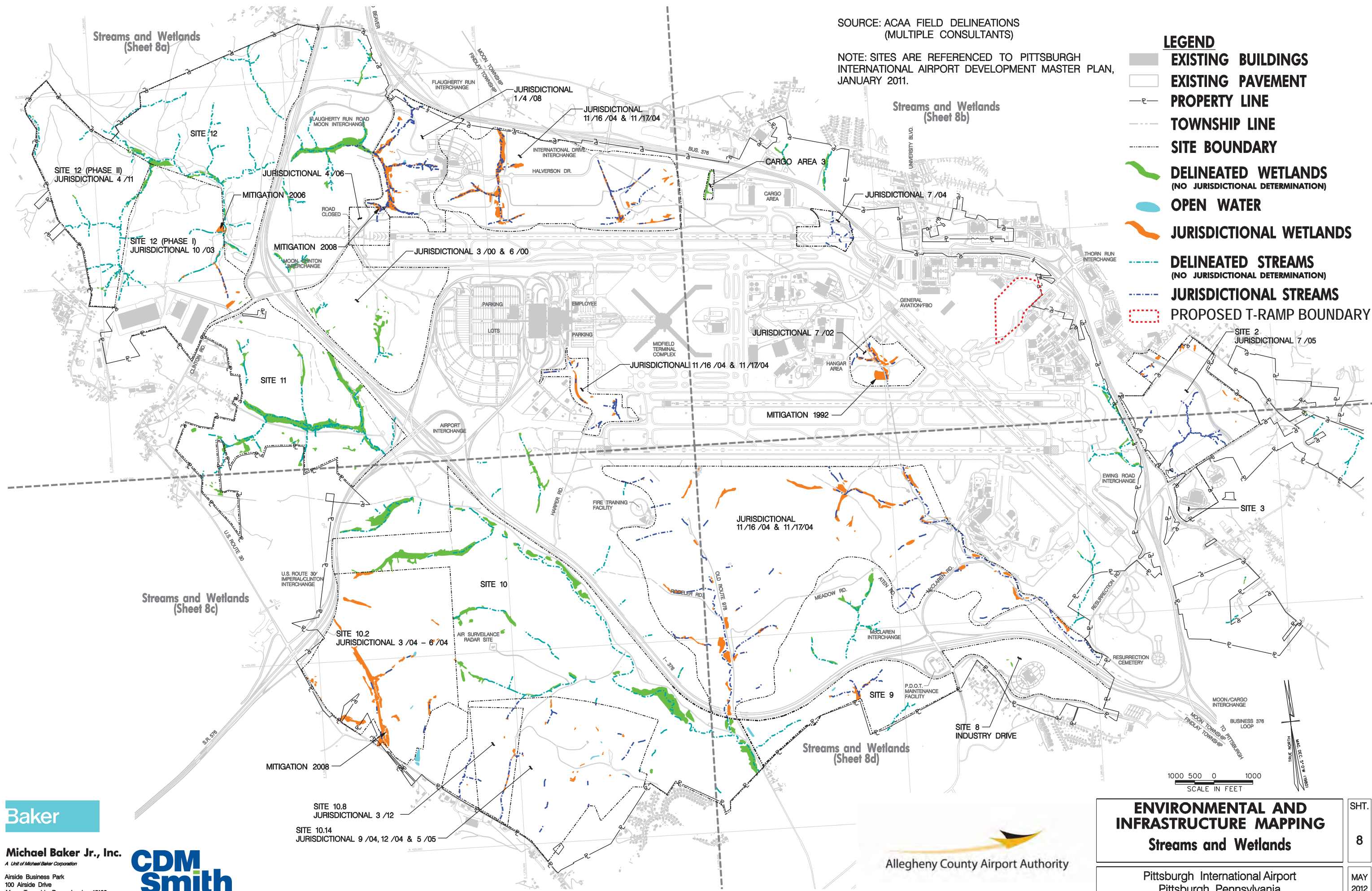
Sheet / Tab: **FIGURE 6**

THIS MAP / IMAGE WAS PRODUCED THROUGH THE U.S. DEPARTMENT OF DEFENSE (DOD) OFFICE OF THE UNITED STATES AIR FORCE RESERVE COMMAND (AFRC) BY THE PITTSBURGH AIR RESERVE STATION, CIVIL ENGINEERING DEPARTMENT - CORAOPOLIS, PA.

COORDINATE SYSTEM:
NAD 1983 STATE PLANE PENNSYLVANIA SOUTH FIPS 3702



Path: C:\Pittsburgh ARS\Projects\Utilities\StormWater\MXD\G.3 STORMWATER SYSTEM 11X17.mxd



Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
Airsides Business Park
100 Airside Drive
Moon Township, Pennsylvania 15108

**CDM
Smith**

ENVIRONMENTAL AND INFRASTRUCTURE MAPPING Streams and Wetlands	SHT.
	8
	MAY 2012
Pittsburgh International Airport Pittsburgh, Pennsylvania	

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix F: Site Photos

THIS SECTION INTENTIONALLY LEFT BLANK
[REFER TO APPENDIX E FOR AERIAL PHOTOS]

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

**Appendix G: Site Inspection Documents
Appendix G-1: Records Search Reports**

The following Record Search Reports are included in this Appendix. They are also listed as references in Appendix A, with the following Reference Numbers:

- (Reference No. 36) “The EDR Radius Map™ Report with GeoCheck®” for the Pittsburgh IAP – 911th Airlift Wing T-RAMP property, Environmental Data Resources Inc., November 14, 2011.
- (Reference No. 37) “The EDR Aerial Photo Decade Package” for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 15, 2011.
- (Reference No. 38) “EDR Building Permit Report” for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 14, 2011.
- (Reference No. 39) “Certified Sanborn Map Report” for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 14, 2011.
- (Reference No. 40) “EDR Historical Topographic Map Report” for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 14, 2011.
- (Reference No. 41) “Vapor Encroachment Screen” for the Pittsburgh IAP – 911th Airlift Wing T-Ramp property, Environmental Data Resources Inc., November 17, 2011.

Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP

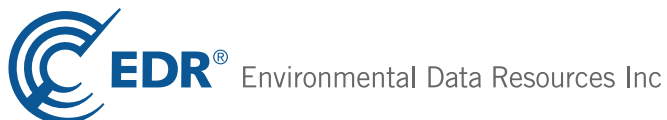
380-399 DEFENSE AVE

Coraopolis, PA 15108

Inquiry Number: 3206711.2s

November 14, 2011

The EDR Radius Map™ Report with GeoCheck®



440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	7
Orphan Summary	33
Government Records Searched/Data Currency Tracking	GR-1
 <u>GEOCHECK ADDENDUM</u>	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-7
Physical Setting Source Map Findings	A-8
Physical Setting Source Records Searched	A-14

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2011 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

380-399 DEFENSE AVE
CORAOPOLIS, PA 15108

COORDINATES

Latitude (North):	40.496200 - 40° 29' 46.3"
Longitude (West):	80.213400 - 80° 12' 48.2"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	566657.5
UTM Y (Meters):	4482919.0
Elevation:	1149 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	40080-D2 OAKDALE, PA
Most Recent Revision:	1993
North Map:	40080-E2 AMBRIDGE, PA
Most Recent Revision:	1990

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2010
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List

EXECUTIVE SUMMARY

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

SHWS..... Hazardous Sites Cleanup Act Site List
HSCA..... HSCA Remedial Sites Listing

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Operating Facilities

State and tribal leaking storage tank lists

UNREG LTANKS..... Unregulated Tank Cases
LAST..... Storage Tank Release Sites
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST..... Listing of Pennsylvania Regulated Underground Storage Tanks

EXECUTIVE SUMMARY

INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

ENG CONTROLS..... Engineering Controls Site Listing
INST CONTROL..... Institutional Controls Site Listing
AUL..... Environmental Covenants Listing

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Listing
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Sites

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
HIST LF..... Abandoned Landfill Inventory
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
US HIST CDL..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

ARCHIVE UST..... Archived Underground Storage Tank Sites
ARCHIVE AST..... Archived Aboveground Storage Tank Sites

Local Land Records

LIENS 2..... CERCLA Lien Information
LUCIS..... Land Use Control Information System

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
SPILLS..... State spills

Other Ascertainable Records

RCRA-NonGen..... RCRA - Non Generators

EXECUTIVE SUMMARY

DOT OPS.....	Incident and Accident Data
DOD.....	Department of Defense Sites
FUDS.....	Formerly Used Defense Sites
CONSENT.....	Superfund (CERCLA) Consent Decrees
ROD.....	Records Of Decision
UMTRA.....	Uranium Mill Tailings Sites
MINES.....	Mines Master Index File
TRIS.....	Toxic Chemical Release Inventory System
TSCA.....	Toxic Substances Control Act
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS.....	Section 7 Tracking Systems
ICIS.....	Integrated Compliance Information System
PADS.....	PCB Activity Database System
MLTS.....	Material Licensing Tracking System
RADINFO.....	Radiation Information Database
FINDS.....	Facility Index System/Facility Registry System
RAATS.....	RCRA Administrative Action Tracking System
UIC.....	Underground Injection Wells
NPDES.....	NPDES Permit Listing
DRYCLEANERS.....	Drycleaner Facility Locations
AIRS.....	Permit and Emissions Inventory Data
INDIAN RESERV.....	Indian Reservations
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
PCB TRANSFORMER.....	PCB Transformer Registration Database
COAL ASH DOE.....	Sleam-Electric Plan Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants.....	EDR Proprietary Manufactured Gas Plants
EDR Historical Auto Stations.....	EDR Proprietary Historic Gas Stations
EDR Historical Cleaners.....	EDR Proprietary Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 06/15/2011 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
THORN RUN CLIFF MINE PARKWAY I	SR00 60 SEC 18 THORN RN	NE 1/8 - 1/4 (0.134 mi.)	1	7

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/15/2011 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PGH INTL AIRPORT AIR RESERVE S	1100 HERMAN AVENUE	SE 1/8 - 1/4 (0.220 mi.)	2	9

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Resources' List of Confirmed Releases.

A review of the LUST list, as provided by EDR, and dated 09/07/2011 has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PGH INTL AIRPORT AIR RESERVE S	1100 HERMAN AVENUE	SE 1/8 - 1/4 (0.220 mi.)	2	9

State and tribal registered storage tank lists

AST: The Aboveground Storage Tank database contains registered ASTs from the Department of Environmental Protection's Listing of Pennsylvania Regulated Aboveground Storage Tanks.

A review of the AST list, as provided by EDR, and dated 09/01/2011 has revealed that there is 1 AST

EXECUTIVE SUMMARY

site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>PGH INTL AIRPORT AIR RESERVE S</i>	<i>1100 HERMAN AVENUE</i>	<i>SE 1/8 - 1/4 (0.220 mi.)</i>	<i>2</i>	<i>9</i>

ADDITIONAL ENVIRONMENTAL RECORDS

Local Land Records

ACT 2-DEED: This listing pertains to sites where the Department has approved a cleanup requiring a deed acknowledgment under Act 2. This list includes sites remediated to a non-residential Statewide health standard (Section 303(g)); all sites demonstrating attainment of a Site-specific standard (Section 304(m)); and sites being remediated as a special industrial area (Section 305(g)). Persons who remediated a site to a standard that requires a deed acknowledgment shall comply with the requirements of the Solid Waste Management Act or the Hazardous Sites Cleanup Act, as referenced in Act 2. These statutes require a property description section in the deed concerning the hazardous substance disposal on the site. The location of disposed hazardous substances and a description of the type of hazardous substances disposed on the site shall be included in the deed acknowledgment. A deed acknowledgment is required at the time of conveyance of the property.

A review of the ACT 2-DEED list, as provided by EDR, and dated 04/23/2010 has revealed that there is 1 ACT 2-DEED site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NUBRITE CHEMICAL CO	250 AIRSIDE DR	WNW 1/4 - 1/2 (0.255 mi.)	3	32

Other Ascertainable Records

MANIFEST: Hazardous waste manifest information.

A review of the MANIFEST list, as provided by EDR, and dated 12/31/2008 has revealed that there is 1 MANIFEST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>PGH INTL AIRPORT AIR RESERVE S</i>	<i>1100 HERMAN AVENUE</i>	<i>SE 1/8 - 1/4 (0.220 mi.)</i>	<i>2</i>	<i>9</i>

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 16 records.

<u>Site Name</u>	<u>Database(s)</u>
911 AIRLIFT WING/CC	NPDES
GREATER PITTSBURG IAP	CERC-NFRAP
USAF PGH ARS	ARCHIVE AST
MONTOUR RR SHOPS	ARCHIVE UST
911 AIRLIFT WING USAF	UST
AEROLINK INTERNATIONAL	RCRA-CESQG, FINDS
OHIO RIVER - BACK CHANNEL	ERNS
PITTSBURGH INTL AIRPORT	ERNS
CHEM CENTRAL PITTSBURGH PARKWAY WE	ERNS
PITTSBURGH AIRPORT HOTEL	FINDS
ROBINSON TWP MA - R. GARDEN	FINDS
MOON TWP MA - MONTOUR RUN STP	FINDS
911 AIRLIFT WING PITTSBURGH AIR RE	FINDS
CHEMCENTRAL/PITTSBURGH	SSTS
PITTSBURGH TERMINALS CORP	MANIFEST
PITTSBURGH TUBE	MANIFEST

OVERVIEW MAP - 3206711.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

0 1/4 1/2 1 Miles

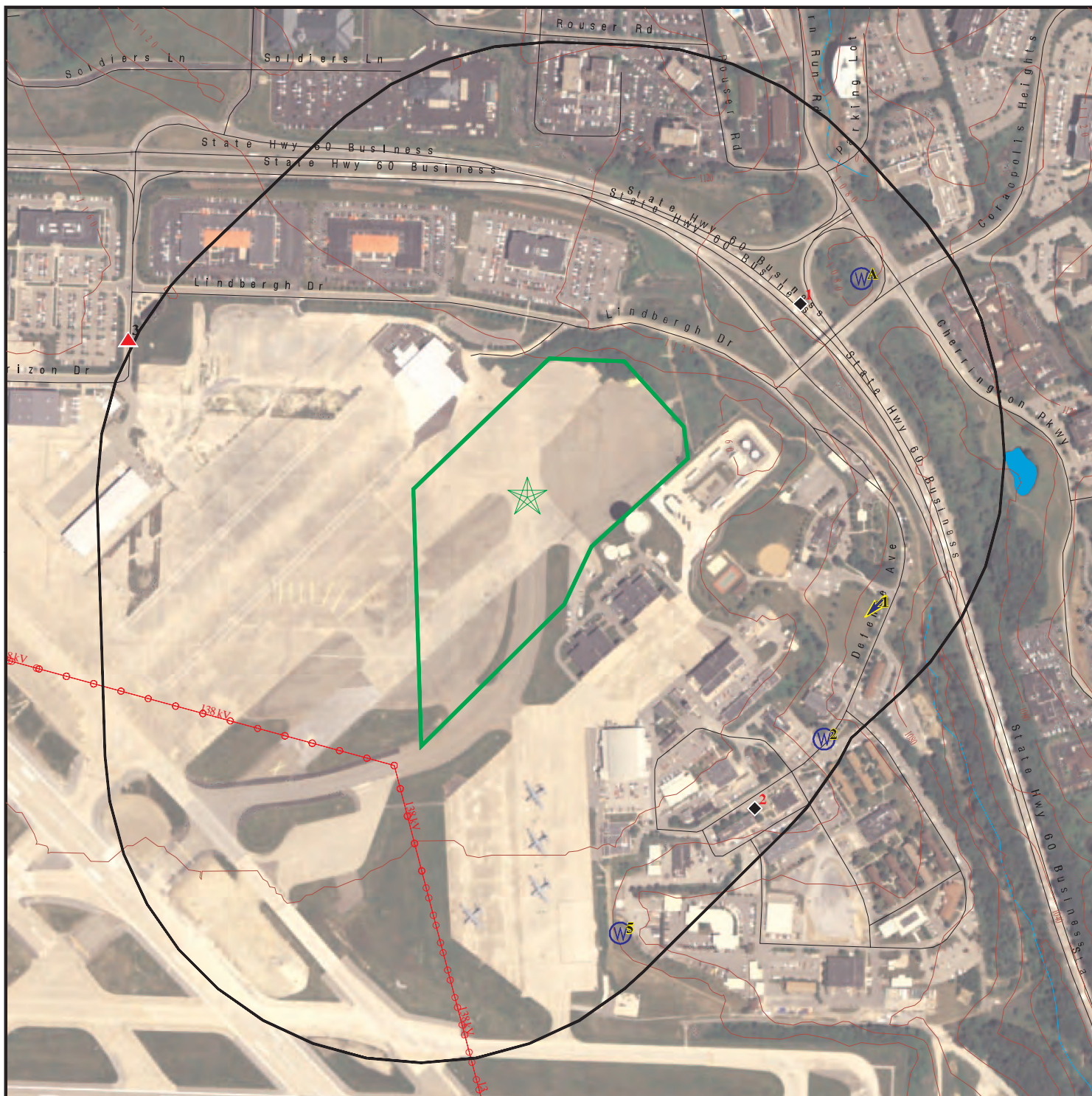


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.


SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP
ADDRESS: 380-399 DEFENSE AVE
Coraopolis PA 15108
LAT/LONG: 40.4962 / 80.2134


CLIENT: Camp, Dresser & McKee, Inc.
CONTACT: Dan Depra
INQUIRY #: 3206711.2s
DATE: November 14, 2011 3:47 pm

DETAIL MAP - 3206711.2s



 Target Property

 Sites at elevations higher than or equal to the target property

 Sites at elevations lower than the target property

 Manufactured Gas Plants

 Sensitive Receptors

 National Priority List Sites

 Dept. Defense Sites

 Indian Reservations BIA

 Power transmission lines

 Oil & Gas pipelines from USGS

 100-year flood zone

 500-year flood zone

 National Wetland Inventory

0 1/16 1/8 1/4 Miles

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP
ADDRESS: 380-399 DEFENSE AVE
Coraopolis PA 15108
LAT/LONG: 40.4962 / 80.2134

CLIENT: Camp, Dresser & McKee, Inc.
CONTACT: Dan Depra
INQUIRY #: 3206711.2s
DATE: November 14, 2011 3:47 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL		1.000	0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS		0.500	0	0	0	NR	NR	0
FEDERAL FACILITY		1.000	0	0	0	0	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP		0.500	0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS		1.000	0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF		0.500	0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG		0.250	0	1	NR	NR	NR	1
RCRA-SQG		0.250	0	1	NR	NR	NR	1
RCRA-CESQG		0.250	0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS		TP	NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
SHWS		1.000	0	0	0	0	NR	0
HSCA		1.000	0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF		0.500	0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST		0.500	0	1	0	NR	NR	1
UNREG LTANKS		0.500	0	0	0	NR	NR	0
LAST		0.500	0	0	0	NR	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered storage tank lists								
UST		0.250	0	0	NR	NR	NR	0
AST		0.250	0	1	NR	NR	NR	1
INDIAN UST		0.250	0	0	NR	NR	NR	0
FEMA UST		0.250	0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS		0.500	0	0	0	NR	NR	0
INST CONTROL		0.500	0	0	0	NR	NR	0
AUL		0.500	0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
VCP		0.500	0	0	0	NR	NR	0
INDIAN VCP		0.500	0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS		0.500	0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI		0.500	0	0	0	NR	NR	0
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
HIST LF		0.500	0	0	0	NR	NR	0
INDIAN ODI		0.500	0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
ARCHIVE UST		0.250	0	0	NR	NR	NR	0
ARCHIVE AST	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
ACT 2-DEED		0.500	0	0	1	NR	NR	1
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA-NonGen		0.250	0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
MANIFEST		0.250	0	1	NR	NR	NR	1
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA		0.500	0	0	0	NR	NR	0

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants	1.000	0	0	0	0	NR	0
EDR Historical Auto Stations	0.250	0	0	NR	NR	NR	0
EDR Historical Cleaners	0.250	0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

1
NE
1/8-1/4
0.134 mi.
705 ft.

THORN RUN CLIFF MINE PARKWAY INT CHG
SR00 60 SEC 18 THORN RN PKWY
MOON, PA 15108

RCRA-LQG
FINDS
1000458991
PAD987320959

Relative:
Lower

RCRA-LQG:

Actual:
1094 ft.

Date form received by agency: 12/16/2004
Facility name: THORN RUN CLIFF MINE PARKWAY INT CHG
Facility address: SR00 60 SEC 18 THORN RN PKWY
MOON, PA 15108
EPA ID: PAD987320959
Mailing address: 4 PKWY CENT 875 GREEN TREE RD
PITTSBURGH, PA 15220
Contact: JOE JEFFREY
Contact address: SR00 60 SEC 18 THORN RN PKWY
MOON, PA 15108
Contact country: US
Contact telephone: (412) 421-0142
Contact email: Not reported
EPA Region: 03
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: PA DEPT TRANSPORTATION
Owner/operator address: OWNERSTREET
OWNERCITY, AK 99999
Owner/operator country: Not reported
Owner/operator telephone: (215) 555-1212
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 01/01/0001
Owner/Op end date: Not reported

Owner/operator name: OPERNAME
Owner/operator address: OPERSTREET
OPERCITY, AK 99999
Owner/operator country: Not reported
Owner/operator telephone: (215) 555-1212
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: OPERNAME
Owner/operator address: OPERSTREET
OPERCITY, AK 99999

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THORN RUN CLIFF MINE PARKWAY INT CHG (Continued)

1000458991

Owner/operator country: Not reported
Owner/operator telephone: (215) 555-1212
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: 01/01/0001
Owner/Op end date: Not reported

Owner/operator name: PA DEPT TRANSPORTATION
Owner/operator address: OWNERSTREET
OWNERCITY, AK 99999

Owner/operator country: Not reported
Owner/operator telephone: (215) 555-1212
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 10/16/1990
Facility name: THORN RUN CLIFF MINE PARKWAY INT CHG
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Violation Status: No violations found

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THORN RUN CLIFF MINE PARKWAY INT CHG (Continued)

1000458991

FINDS:

Registry ID: 110006432510

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

PA-EFACTS (Pennsylvania - Environmental Facility Application Compliance Tracking System) is a Department-wide database that provides a holistic view of clients and sites (including facilities) that DEP regulates.

2
SE
1/8-1/4
0.220 mi.
1164 ft.

PGH INTL AIRPORT AIR RESERVE STA
1100 HERMAN AVENUE
CORAOPOLIS, PA 15108

RCRA-SQG
FINDS
LUST
AST
MANIFEST
MANIFEST
MANIFEST

1000406862
PA2570024289

Relative:
Lower

Actual:
1128 ft.

RCRA-SQG:

Date form received by agency: 04/22/2010
Facility name: 911TH AIRLIFT WING
Facility address: PITTSBURGH INTL ARPRT ARS
2475 DEFENSE AVE STE 101
CORAOPOLIS, PA 151084403
EPA ID: PA2570024289
Mailing address: 1100 HERMAN AVE
CORAOPOLIS, PA 151084421
Contact: JOSEPH MATIS
Contact address: 1100 HERMAN AVE
CORAOPOLIS, PA 151084421
Contact country: US
Contact telephone: (412) 474-8749
Contact email: JOSEPH.MATIS@PITTSBURGH.AR.MIL
EPA Region: 03
Land type: Federal
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: DEPT OF THE AIR FORCE
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Federal

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Owner/Operator Type: Operator
Owner/Op start date: 01/01/1970
Owner/Op end date: Not reported

Owner/operator name: DEPT OF THE AIR FORCE
Owner/operator address: 1100 HERMAN AVE
CORAOPOLIS, PA 15108

Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Federal
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1970
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 03/22/2001
Facility name: 911TH AIRLIFT WING
Classification: Large Quantity Generator

Date form received by agency: 12/11/2000
Facility name: 911TH AIRLIFT WING
Classification: Small Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE
DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code:	D003
Waste name:	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Waste code:	D004
Waste name:	ARSENIC
Waste code:	D005
Waste name:	BARIUM
Waste code:	D006
Waste name:	CADMIUM
Waste code:	D007
Waste name:	CHROMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Waste code:	D010
Waste name:	SELENIUM
Waste code:	D011
Waste name:	SILVER
Waste code:	D018
Waste name:	BENZENE
Waste code:	D019
Waste name:	CARBON TETRACHLORIDE
Waste code:	D022
Waste name:	CHLOROFORM
Waste code:	D028
Waste name:	1,2-DICHLOROETHANE
Waste code:	D035
Waste name:	METHYL ETHYL KETONE
Waste code:	D039
Waste name:	TETRACHLOROETHYLENE
Waste code:	D040
Waste name:	TRICHLOROETHYLENE
Waste code:	F001
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code:
Waste name:

F002
THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code:
Waste name:

F003
THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code:
Waste name:

F005
THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code:
Waste name:

U002
ACETONE (I)

Waste code:
Waste name:

U050
CHRYSENE

Waste code:
Waste name:

U051
CREOSOTE

Waste code:
Waste name:

U080
METHANE, DICHLORO-

Waste code:
Waste name:

U117
ETHANE, 1,1'-OXYBIS-(I)

Waste code:
Waste name:

U129
CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-,

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

(1ALPHA,2ALPHA,3BETA,4ALPHA,5ALPHA,6BETA)-

Waste code: U151
Waste name: MERCURY

Waste code: U154
Waste name: METHANOL (l)

Waste code: U226
Waste name: ETHANE, 1,1,1-TRICHLORO-

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: Universal Waste - Small Quantity Handlers
Date violation determined: 04/30/2009
Date achieved compliance: 04/30/2009
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/14/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 262.42
Area of violation: Generators - Manifest
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/10/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 265.176
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 262.41
Area of violation: Generators - General
Date violation determined: 01/21/1992

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Date achieved compliance: 10/20/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/10/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 265.16(f)(1)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - SQG TO GEN
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 400 CFR 265.174
Area of violation: Generators - Records/Reporting
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 40 CFR 256.16(a)(b)(c)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 265.174
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 262.34(a)(2)(4)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 262.42(b)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 262.34(a)(1)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: State

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/10/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 262.34(a)(5) & 265.16
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/10/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 262.41(a)(6)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 265.16(f)(2)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 265.52(b)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 262.41(a)(7)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 262.34(a)(4)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 261.41(b)(7)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/10/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/01/1990
Date achieved compliance: 03/09/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/13/1990

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/01/1990
Date achieved compliance: 10/20/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/13/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Evaluation Action Summary:

Evaluation date: 04/30/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Universal Waste - Small Quantity Handlers
Date achieved compliance: 04/30/2009
Evaluation lead agency: EPA

Evaluation date: 10/20/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/21/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 10/20/1992
Evaluation lead agency: State

Evaluation date: 01/21/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 10/20/1992
Evaluation lead agency: State

Evaluation date: 01/21/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 10/20/1992
Evaluation lead agency: EPA

Evaluation date: 01/21/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: Generators - General
Date achieved compliance: 10/20/1992
Evaluation lead agency: EPA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Evaluation date: 01/21/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: Generators - Records/Reporting
Date achieved compliance: 10/20/1992
Evaluation lead agency: EPA

Evaluation date: 02/01/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 03/09/1990
Evaluation lead agency: State

Evaluation date: 02/01/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 10/20/1992
Evaluation lead agency: State

FINDS:

Registry ID: 110001222622

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

PA-EFACTS (Pennsylvania - Environmental Facility Application Compliance Tracking System) is a Department-wide database that provides a holistic view of clients and sites (including facilities) that DEP regulates.

PCS (Permit Compliance System) is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

LUST:

Region: LUST
Facility Id: 02-81147
Facility Address2: 2475 DEFENSE AVE
Facility Type: Underground Storage Tank Containing Petroleum
Facility Status: Cleanup Completed
Status Date: 04/30/2002
Release Date: 09/08/1994
Source Cause Desc: Not reported

Region: 4500
Facility Id: 02-81147
Facility Address2: 2475 DEFENSE AVE
Facility Type: Underground Storage Tank Containing Petroleum
Facility Status: Cleanup Completed
Status Date: 04/30/2002
Release Date: 04/01/1998
Source Cause Desc: Not reported

AST:

Mailing Name: 911 AIRLIFT WING USAF
Mailing Address: PITTSBURGH AIR RESERVE STATION
Mailing Address: 2475 DEFENSE AVE
Mailing City,St,Zip: CORAOPOLIS, PA 15108-4403
Municipality: Moon
Client Id: 166443
Site ID: 562565
Other Id: 02-81147
2nd Facility Addr: 2475 DEFENSE AVE
Region Code: 4500
Region Code Name: EP Sw Rgnl Off Pittsburgh
Tank Code: AST
Tank Seq Num: 009A
Tank Capacity: 2500
Date Installed: Not reported
Substance: Aviation Gasoline
Tank Status: Currently In Use
Inspection Code: Not reported
Tank Last Inspected: Not reported
Registration Expiration Date: 10/04/2011

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

PA MANIFEST:

Manifest Number: PAH237145
Manifest Type: D
Generator EPA Id: PA2570024289
Generator Date: 04/27/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: KYD053348108
TSD Date: Not reported
TSD Facility Name: SAFETY KLEEN CORP
TSD Facility Address: 3700 LAGRANGE RD
TSD Facility City: SMITHFIELD
TSD Facility State: KY
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D018
Container Number: 6
Container Type: Metal drums, barrels, kegs
Waste Quantity: 1310
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D001
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 446
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D001
Container Number: 2
Container Type: Metal drums, barrels, kegs
Waste Quantity: 142
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D001
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 18
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D008
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 18
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D035
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 18
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 4
Waste Number: D035
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 23
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 4
Waste Number: F005
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 23
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D001
Container Number: 1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Container Type: Metal drums, barrels, kegs
Waste Quantity: 181
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D007
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 181
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D018
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 181
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Date TSP Sig:	Not reported
Manifest Number:	PAH294854
Manifest Type:	T
Generator EPA Id:	PA2570024289
Generator Date:	06/09/06
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
TSD Epa Id:	WVD981107600
TSD Date:	Not reported
TSD Facility Name:	AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address:	1750 MORGANTOWN IND PK
TSD Facility City:	MORGANTOWN
TSD Facility State:	WV
Facility Telephone:	412-474-8749
Page Number:	1
Line Number:	1
Waste Number:	D039
Container Number:	1
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	181
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported
Manifest Number:	PAH294854
Manifest Type:	T
Generator EPA Id:	PA2570024289
Generator Date:	06/09/06
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
TSD Epa Id:	WVD981107600
TSD Date:	Not reported
TSD Facility Name:	AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address:	1750 MORGANTOWN IND PK
TSD Facility City:	MORGANTOWN
TSD Facility State:	WV
Facility Telephone:	412-474-8749
Page Number:	1
Line Number:	2
Waste Number:	D001
Container Number:	1
Container Type:	Fiberboard or plastic drums, barrels, kegs
Waste Quantity:	6
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported
Manifest Number:	PAH294854
Manifest Type:	T
Generator EPA Id:	PA2570024289

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D007
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 6
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D035
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 6
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D035
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 2
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH295009
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 03/10/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D001
Container Number: 2
Container Type: Metal drums, barrels, kegs
Waste Quantity: 60
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH295009
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 03/10/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D001
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 78
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH295009
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 03/10/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: NONE
Container Number: 1
Container Type: Burlap, cloth, paper or plastic bags
Waste Quantity: 420
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Manifest Number: PAH295009
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 03/10/06
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: Not reported
TSD Epa Id: WVD981107600
TSD Date: Not reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 4
Waste Number: NONE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 234
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

[Click this hyperlink](#) while viewing on your computer to access
54 additional PA MANIFEST: record(s) in the EDR Site Report.

NY MANIFEST:

EPA ID: PA2570024289
Country: USA
Mailing Name: UNITED STATES MILITARY
Mailing Contact: UNITED STATES MILITARY
Mailing Address: 911TH TAC-GREATER PITTSBURGH
Mailing Address 2: Not reported
Mailing City: AIRPORT-PITTSBURGH
Mailing State: PA
Mailing Zip: 15231
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 717-267-9357

Document ID: NYG1228518
Manifest Status: Not reported
Trans1 State ID: NJD054126164
Trans2 State ID: Not reported
Generator Ship Date: 12/10/1998
Trans1 Recv Date: 12/10/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 12/11/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: PA2570024289
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: T3K761
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00213
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00560
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 00053
Units: P - Pounds

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 98

Document ID: NYA8099613
Manifest Status: Completed copy
Trans1 State ID: 000000000
Trans2 State ID: 000000000
Generator Ship Date: 890511
Trans1 Recv Date: 890511
Trans2 Recv Date: Not reported
TSD Site Recv Date: 890530
Part A Recv Date: 890519
Part B Recv Date: 890601
Generator EPA ID: PA2570024289
Trans1 EPA ID: TND987766292
Trans2 EPA ID: GAD981233000
TSDF ID: NYD000632372
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 00001
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Year: 89

NJ MANIFEST:

Manifest Code: 001988587SKS
EPA ID: PA2570024289
Date Shipped: 10/02/09
TSDF EPA ID: NJD002182897
Transporter EPA ID: TXR000050930
Transporter 2 EPA ID: NJD071629976
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 10/02/09
Date Trans2 Transported Waste: 10/13/09
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 10/13/09
Transporter 1 Decal: Not reported
Transporter 2 Decal: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PGH INTL AIRPORT AIR RESERVE STA (Continued)

1000406862

Data Entry Number: Not reported
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D001
Manifest Year: 2009 New Jersey Manifest Data
Quantity: 269
Unit: P
Hand Code: H061

3
WNW
1/4-1/2
0.255 mi.
1344 ft.

NUBRITE CHEMICAL CO
250 AIRSIDE DR
CORAOPOLIS, PA

ACT 2-DEED **S109841507**
N/A

Relative:
Higher

ACT 2-DEED:
Region: 4500
Municipality: Haysville
Site Size: Not reported
Cleanup Standard: Site Specific
Cleanup Indicator: INSTC
Response Date: 11/30/2006
Category Description: Chlorinated Solvents, Lead
Land Designation Code: Not reported

Actual:
1159 ft.

Region: 4500
Municipality: Haysville
Site Size: Not reported
Cleanup Standard: Site Specific
Cleanup Indicator: INSTC
Response Date: 11/30/2006
Category Description: Chlorinated Solvents, Lead
Land Designation Code: Not reported

Count: 16 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CORAOPOLIS	S111113716	MONTOUR RR SHOPS	RT 51 & ELIZABETH AVE	15108	ARCHIVE UST
CORAOPOLIS	1003865136	GREATER PITTSBURG IAP	RTE 60 CARROT BEENS SCHOOL RD	15108	CERC-NFRAP
CORAOPOLIS	1012218596	PITTSBURGH AIRPORT HOTEL	1480 BEERS SCHOOL ROAD	15108	FINDS
CORAOPOLIS	1004772614	AEROLINK INTERNATIONAL	CARGO BLDG #1 STATE RT 60	15108	RCRA-CESQG, FINDS
CORAOPOLIS	1012050739	CHEMCENTRAL/PITTSBURGH	3000 CASTEEL DR	15108	SSTS
CORAOPOLIS	1012244211	ROBINSON TWP MA - R. GARDEN	FOREST GROVE RD	15108	FINDS
CORAOPOLIS	1012244110	MOON TWP MA - MONTOUR RUN STP	HASSAM RD	15108	FINDS
CORAOPOLIS	92275050	OHIO RIVER - BACK CHANNEL	OHIO RIVER - BACK CHANNEL	15108	ERNS
CORAOPOLIS	U004157773	911 AIRLIFT WING USAF	PGH AIR RESERVE STA	15108	UST
CORAOPOLIS	S110314664	911 AIRLIFT WING/CC	PITTSBURGH IAP ARS	15108	NPDES
CORAOPOLIS	2010956453	PITTSBURGH INTL AIRPORT	PITTSBURGH INTL AIRPORT	15108	ERNS
CORAOPOLIS	S108846145	USAF PGH ARS	1430 SABRE ST	15108	ARCHIVE AST
CORAOPOLIS	S109247057	PITTSBURGH TERMINALS CORP	9 THORN ST	15108	MANIFEST
CORAPOLIS	93329615	CHEM CENTRAL PITTSBURGH PARKWAY WE	CHEM CENTRAL PITTSBURGH PARKWA	15108	ERNS
CORAPOLIS	1012144840	911 AIRLIFT WING PITTSBURGH AIR RE	2475 DEFENSE AVENUE	15108	FINDS
MONACA	S109788430	PITTSBURGH TUBE	PENNSYLVANIA AVE.	15108	MANIFEST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 06/30/2011	Source: EPA
Date Data Arrived at EDR: 07/12/2011	Telephone: N/A
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 10/12/2011
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/23/2012
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 06/30/2011	Source: EPA
Date Data Arrived at EDR: 07/12/2011	Telephone: N/A
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 10/12/2011
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/23/2012
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 06/30/2011	Source: EPA
Date Data Arrived at EDR: 07/12/2011	Telephone: N/A
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 10/12/2011
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/23/2012
	Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/25/2011	Source: EPA
Date Data Arrived at EDR: 03/01/2011	Telephone: 703-412-9810
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 09/01/2011
Number of Days to Update: 62	Next Scheduled EDR Contact: 12/12/2011
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/10/2010	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/11/2011	Telephone: 703-603-8704
Date Made Active in Reports: 02/16/2011	Last EDR Contact: 10/14/2011
Number of Days to Update: 36	Next Scheduled EDR Contact: 01/23/2012
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/25/2011	Source: EPA
Date Data Arrived at EDR: 03/01/2011	Telephone: 703-412-9810
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 09/01/2011
Number of Days to Update: 62	Next Scheduled EDR Contact: 12/12/2011
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/09/2011
Date Data Arrived at EDR: 03/15/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 91

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/14/2011
Next Scheduled EDR Contact: 02/27/2012
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 10/05/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 10/05/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 10/05/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 10/05/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/16/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2011	Telephone: 703-603-0695
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 09/12/2011
Number of Days to Update: 81	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/16/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2011	Telephone: 703-603-0695
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 09/12/2011
Number of Days to Update: 81	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 10/03/2011	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 10/04/2011	Telephone: 202-267-2180
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 10/04/2011
Number of Days to Update: 38	Next Scheduled EDR Contact: 01/16/2012
	Data Release Frequency: Annually

State- and tribal - equivalent NPL

SHWS: Hazardous Sites Cleanup Act Site List

The Hazardous Sites Cleanup Act Site List includes sites listed on PA Priority List, sites delisted from PA Priority List, Interim Response Completed sites, and Sites Being Studied or Response Being Planned.

Date of Government Version: 10/03/2011	Source: Department Environmental Protection
Date Data Arrived at EDR: 10/26/2011	Telephone: 717-783-7816
Date Made Active in Reports: 11/02/2011	Last EDR Contact: 10/26/2011
Number of Days to Update: 7	Next Scheduled EDR Contact: 02/06/2012
	Data Release Frequency: Semi-Annually

HSCA: HSCA Remedial Sites Listing

A list of remedial sites on the PA Priority List. This is the PA state equivalent of the federal NPL superfund list.

Date of Government Version: 12/27/2010	Source: Department of Environmental Protection
Date Data Arrived at EDR: 02/04/2011	Telephone: 717-783-7816
Date Made Active in Reports: 03/02/2011	Last EDR Contact: 10/28/2011
Number of Days to Update: 26	Next Scheduled EDR Contact: 02/06/2012
	Data Release Frequency: Varies

State and tribal landfill and/or solid waste disposal site lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SWF/LF: Operating Facilities

The listing includes Municipal Waste Landfills, Construction/Demolition Waste Landfills and Waste-to-Energy Facilities.

Date of Government Version: 09/01/2011

Date Data Arrived at EDR: 09/21/2011

Date Made Active in Reports: 11/02/2011

Number of Days to Update: 42

Source: Department of Environmental Protection

Telephone: 717-787-7564

Last EDR Contact: 09/01/2011

Next Scheduled EDR Contact: 12/12/2011

Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

LUST: Storage Tank Release Sites

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 09/07/2011

Date Data Arrived at EDR: 09/21/2011

Date Made Active in Reports: 11/02/2011

Number of Days to Update: 42

Source: Department of Environmental Protection

Telephone: 717-783-7509

Last EDR Contact: 11/11/2011

Next Scheduled EDR Contact: 01/02/2012

Data Release Frequency: Semi-Annually

UNREG LTANKS: Unregulated Tank Cases

Leaking storage tank cases from unregulated storage tanks.

Date of Government Version: 04/12/2002

Date Data Arrived at EDR: 08/14/2003

Date Made Active in Reports: 08/29/2003

Number of Days to Update: 15

Source: Department of Environmental Protection

Telephone: 717-783-7509

Last EDR Contact: 08/14/2003

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

LAST: Storage Tank Release Sites

Leaking Aboveground Storage Tank Incident Reports.

Date of Government Version: 09/07/2011

Date Data Arrived at EDR: 09/21/2011

Date Made Active in Reports: 11/02/2011

Number of Days to Update: 42

Source: Department of Environmental Protection

Telephone: 717-783-7509

Last EDR Contact: 11/11/2011

Next Scheduled EDR Contact: 01/02/2012

Data Release Frequency: Semi-Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/31/2011

Date Data Arrived at EDR: 02/01/2011

Date Made Active in Reports: 03/21/2011

Number of Days to Update: 48

Source: Environmental Protection Agency

Telephone: 415-972-3372

Last EDR Contact: 10/31/2011

Next Scheduled EDR Contact: 02/13/2012

Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 08/11/2011

Date Data Arrived at EDR: 08/12/2011

Date Made Active in Reports: 09/13/2011

Number of Days to Update: 32

Source: EPA Region 4

Telephone: 404-562-8677

Last EDR Contact: 10/31/2011

Next Scheduled EDR Contact: 02/13/2012

Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/02/2011
Date Data Arrived at EDR: 11/04/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 7

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/31/2011
Next Scheduled EDR Contact: 02/13/2012
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2011
Date Data Arrived at EDR: 11/01/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 10

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 11/01/2011
Next Scheduled EDR Contact: 02/13/2012
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/31/2011
Next Scheduled EDR Contact: 02/13/2012
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/16/2011
Date Data Arrived at EDR: 06/02/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 103

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/31/2011
Next Scheduled EDR Contact: 02/13/2012
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/18/2011
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 25

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/31/2011
Next Scheduled EDR Contact: 02/13/2012
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Listing of Pennsylvania Regulated Underground Storage Tanks

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 09/01/2011
Date Data Arrived at EDR: 09/21/2011
Date Made Active in Reports: 11/02/2011
Number of Days to Update: 42

Source: Department of Environmental Protection
Telephone: 717-772-5599
Last EDR Contact: 09/21/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Varies

AST: Listing of Pennsylvania Regulated Aboveground Storage Tanks
Registered Aboveground Storage Tanks.

Date of Government Version: 09/01/2011
Date Data Arrived at EDR: 09/21/2011
Date Made Active in Reports: 11/02/2011
Number of Days to Update: 42

Source: Department of Environmental Protection
Telephone: 717-772-5599
Last EDR Contact: 09/21/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 08/04/2011	Source: EPA Region 9
Date Data Arrived at EDR: 08/05/2011	Telephone: 415-972-3368
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 39	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/18/2011	Source: EPA Region 8
Date Data Arrived at EDR: 08/19/2011	Telephone: 303-312-6137
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 25	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/01/2011	Source: EPA Region 7
Date Data Arrived at EDR: 06/01/2011	Telephone: 913-551-7003
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 13	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/02/2011	Source: EPA Region 10
Date Data Arrived at EDR: 11/04/2011	Telephone: 206-553-2857
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 7	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2011	Source: EPA, Region 1
Date Data Arrived at EDR: 11/01/2011	Telephone: 617-918-1313
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 10	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 08/11/2011	Source: EPA Region 4
Date Data Arrived at EDR: 08/12/2011	Telephone: 404-562-9424
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 32	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 07/01/2011	Source: EPA Region 5
Date Data Arrived at EDR: 08/26/2011	Telephone: 312-886-6136
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 18	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011	Source: EPA Region 6
Date Data Arrived at EDR: 05/11/2011	Telephone: 214-665-7591
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Semi-Annually

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 10/17/2011
Number of Days to Update: 55	Next Scheduled EDR Contact: 01/30/2012
	Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Controls Site Listing

Under the Land Recycling Act (Act 2) persons who perform a site cleanup using the site-specific standard or the special industrial area standard may use engineering or institutional controls as part of the response action. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/15/2008	Source: Department of Environmental Protection
Date Data Arrived at EDR: 05/16/2008	Telephone: 717-783-9470
Date Made Active in Reports: 06/12/2008	Last EDR Contact: 10/24/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 02/06/2012
	Data Release Frequency: Varies

AUL: Environmental Covenants Listing

A listing of sites with environmental covenants.

Date of Government Version: 03/25/2011	Source: Department of Environmental Protection
Date Data Arrived at EDR: 03/25/2011	Telephone: 717-783-7509
Date Made Active in Reports: 04/20/2011	Last EDR Contact: 10/24/2011
Number of Days to Update: 26	Next Scheduled EDR Contact: 02/06/2012
	Data Release Frequency: Varies

INST CONTROL: Institutional Controls Site Listing

Under the Land Recycling Act (Act 2) persons who perform a site cleanup using the site-specific standard or the special industrial area standard may use engineering or institutional controls as part of the response action. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/15/2008
Date Data Arrived at EDR: 05/16/2008
Date Made Active in Reports: 06/12/2008
Number of Days to Update: 27

Source: Department of Environmental Protection
Telephone: 717-783-9470
Last EDR Contact: 10/24/2011
Next Scheduled EDR Contact: 02/06/2012
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 08/04/2011
Date Data Arrived at EDR: 10/04/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 38

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/04/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Sites

The VCP listings included Completed Sites, Sites in Progress and Act 2 Non-Use Aquifer Determinations Sites. Formerly known as the Act 2, the Land Recycling Program encourages the voluntary cleanup and reuse of contaminated commercial and industrial sites.

Date of Government Version: 10/18/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 11/02/2011
Number of Days to Update: 14

Source: Department of Environmental Protection
Telephone: 717-783-2388
Last EDR Contact: 10/19/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Semi-Annually

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Sites

Brownfields are generally defined as abandoned or underused industrial or commercial properties where redevelopment is complicated by actual or perceived environmental contamination. Brownfields vary in size, location, age and past use. They can range from a small, abandoned corner gas station to a large, multi-acre former manufacturing plant that has been closed for years.

Date of Government Version: 07/27/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 08/29/2011
Number of Days to Update: 24

Source: Department of Environmental Protection
Telephone: 717-783-1566
Last EDR Contact: 07/27/2011
Next Scheduled EDR Contact: 11/07/2011
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 06/27/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/27/2011	Telephone: 202-566-2777
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 09/28/2011
Number of Days to Update: 78	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 09/26/2011
Number of Days to Update: 137	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

HIST LF INVENTORY: Facility Inventory

A listing of solid waste facilities. This listing is no longer updated or maintained by the Department of Environmental Protection. At the time the listing was available, the DEP's name was the Department of Environmental Resources.

Date of Government Version: 06/02/1999	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/12/2005	Telephone: 717-787-7381
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 09/19/2005
Number of Days to Update: 30	Next Scheduled EDR Contact: 12/19/2005
	Data Release Frequency: No Update Planned

HIST LF ALI: Abandoned Landfill Inventory

The report provides facility information recorded in the Pennsylvania Department of Environmental Protection ALI database. Some of this information has been abstracted from old records and may not accurately reflect the current conditions and status at these facilities

Date of Government Version: 01/04/2005	Source: Department of Environmental Protection
Date Data Arrived at EDR: 01/04/2005	Telephone: 717-787-7564
Date Made Active in Reports: 02/04/2005	Last EDR Contact: 08/31/2011
Number of Days to Update: 31	Next Scheduled EDR Contact: 12/12/2011
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HIST LF INACTIVE: Inactive Facilities List

A listing of inactive non-hazardous facilities (10000 & 300000 series). This listing is no longer updated or maintained by the Department of Environmental Protection. At the time the listing was available, the DEP's name was the Department of Environmental Resources.

Date of Government Version: 12/20/1994	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/12/2005	Telephone: 717-787-7381
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/21/2005
Number of Days to Update: 30	Next Scheduled EDR Contact: 12/19/2005
	Data Release Frequency: No Update Planned

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 11/07/2011
Number of Days to Update: 52	Next Scheduled EDR Contact: 02/20/2012
	Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/08/2011	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/16/2011	Telephone: 202-307-1000
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 09/07/2011
Number of Days to Update: 13	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: Quarterly

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 11/19/2008	Telephone: 202-307-1000
Date Made Active in Reports: 03/30/2009	Last EDR Contact: 03/23/2009
Number of Days to Update: 131	Next Scheduled EDR Contact: 06/22/2009
	Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

ARCHIVE UST: Archived Underground Storage Tank Sites

The list includes tanks storing highly hazardous substances that were removed from the DEP's Storage Tank Information database because of the Department's policy on sensitive information. The list also may include tanks that are removed or permanently closed.

Date of Government Version: 09/01/2011	Source: Department of Environmental Protection
Date Data Arrived at EDR: 09/21/2011	Telephone: 717-772-5599
Date Made Active in Reports: 11/03/2011	Last EDR Contact: 09/21/2011
Number of Days to Update: 43	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ARCHIVE AST: Archived Aboveground Storage Tank Sites

The list includes aboveground tanks with a capacity greater than 21,000 gallons that were removed from the DEP's Storage Tank Information database because of the Department's policy on sensitive information. The list also may include tanks that are removed or permanently closed.

Date of Government Version: 09/01/2011	Source: Department of Environmental Protection
Date Data Arrived at EDR: 09/21/2011	Telephone: 717-772-5599
Date Made Active in Reports: 11/03/2011	Last EDR Contact: 09/21/2011
Number of Days to Update: 43	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: Varies

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 09/09/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/16/2011	Telephone: 202-564-6023
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 13	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005	Source: Department of the Navy
Date Data Arrived at EDR: 12/11/2006	Telephone: 843-820-7326
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 07/11/2011
Number of Days to Update: 31	Next Scheduled EDR Contact: 09/05/2011
	Data Release Frequency: Varies

ACT 2-DEED: Act 2-Deed Acknowledgment Sites

This listing pertains to sites where the Department has approved a cleanup requiring a deed acknowledgment under Act 2. This list includes sites remediated to a non-residential Statewide health standard (Section 303(g)); all sites demonstrating attainment of a Site-specific standard (Section 304(m)); and sites being remediated as a special industrial area (Section 305(g)). Persons who remediated a site to a standard that requires a deed acknowledgment shall comply with the requirements of the Solid Waste Management Act or the Hazardous Sites Cleanup Act, as referenced in Act 2. These statutes require a property description section in the deed concerning the hazardous substance disposal on the site. The location of disposed hazardous substances and a description of the type of hazardous substances disposed on the site shall be included in the deed acknowledgment. A deed acknowledgment is required at the time of conveyance of the property.

Date of Government Version: 04/23/2010	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/28/2010	Telephone: 717-783-9470
Date Made Active in Reports: 04/30/2010	Last EDR Contact: 07/22/2011
Number of Days to Update: 2	Next Scheduled EDR Contact: 11/07/2011
	Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 10/04/2011	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 10/04/2011	Telephone: 202-366-4555
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 10/04/2011
Number of Days to Update: 38	Next Scheduled EDR Contact: 01/16/2012
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SPILLS: State spills

A listing of hazardous material incidents.

Date of Government Version: 07/21/2011
Date Data Arrived at EDR: 07/22/2011
Date Made Active in Reports: 08/09/2011
Number of Days to Update: 18

Source: DEP, Emergency Response
Telephone: 717-787-5715
Last EDR Contact: 10/31/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Varies

Other Ascertainable Records

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 10/05/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/29/2011
Date Data Arrived at EDR: 08/09/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 94

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 11/08/2011
Next Scheduled EDR Contact: 02/20/2012
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/20/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 08/12/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 112

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/01/2011
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 41

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/03/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/31/2011
Date Data Arrived at EDR: 09/14/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 15

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/14/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/21/2010
Date Made Active in Reports: 01/28/2011
Number of Days to Update: 99

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/18/2011
Date Data Arrived at EDR: 09/08/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 21

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/08/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/17/2010
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 94

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 09/01/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/27/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/31/2011
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/12/2011
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 77	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/07/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/21/2011	Telephone: 202-564-5088
Date Made Active in Reports: 03/21/2011	Last EDR Contact: 09/26/2011
Number of Days to Update: 59	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2010	Source: EPA
Date Data Arrived at EDR: 11/10/2010	Telephone: 202-566-0500
Date Made Active in Reports: 02/16/2011	Last EDR Contact: 10/19/2011
Number of Days to Update: 98	Next Scheduled EDR Contact: 01/30/2012
	Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/21/2011	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 07/15/2011	Telephone: 301-415-7169
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 09/12/2011
Number of Days to Update: 60	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/11/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/13/2011	Telephone: 202-343-9775
Date Made Active in Reports: 02/16/2011	Last EDR Contact: 10/13/2011
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/23/2012
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/14/2010	Source: EPA
Date Data Arrived at EDR: 04/16/2010	Telephone: (215) 814-5000
Date Made Active in Reports: 05/27/2010	Last EDR Contact: 09/13/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 03/01/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 62

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/01/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Biennially

UIC: Underground Injection Wells

A listing of underground injection well locations.

Date of Government Version: 09/26/2011
Date Data Arrived at EDR: 09/27/2011
Date Made Active in Reports: 11/02/2011
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: 717-783-7209
Last EDR Contact: 09/27/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Varies

NPDES: NPDES Permit Listing

A listing of facilities with an NPDES permit.

Date of Government Version: 03/24/2011
Date Data Arrived at EDR: 06/15/2011
Date Made Active in Reports: 07/21/2011
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: 717-787-9642
Last EDR Contact: 09/16/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Varies

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 12/01/2009
Date Made Active in Reports: 12/14/2009
Number of Days to Update: 13

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Annually

DRYCLEANERS: Drycleaner Facility Locations

A listing of drycleaner facility locations.

Date of Government Version: 09/26/2011
Date Data Arrived at EDR: 09/26/2011
Date Made Active in Reports: 11/02/2011
Number of Days to Update: 37

Source: Department of Environmental Protection
Telephone: 717-787-9702
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Varies

AIRS: Permit and Emissions Inventory Data

Permit and emissions inventory data.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 10/20/2010
Date Made Active in Reports: 12/06/2010
Number of Days to Update: 47

Source: Department of Environmental Protection
Telephone: 717-787-9702
Last EDR Contact: 10/24/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Annually

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/20/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2011	Telephone: 615-532-8599
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 10/24/2011
Number of Days to Update: 54	Next Scheduled EDR Contact: 02/06/2012
	Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/20/2011
Number of Days to Update: 339	Next Scheduled EDR Contact: 01/30/2012
	Data Release Frequency: N/A

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/03/2011	Telephone: N/A
Date Made Active in Reports: 03/21/2011	Last EDR Contact: 09/16/2011
Number of Days to Update: 77	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 01/01/2008	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/18/2009	Telephone: 202-566-0517
Date Made Active in Reports: 05/29/2009	Last EDR Contact: 11/04/2011
Number of Days to Update: 100	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 10/18/2011
Number of Days to Update: 76	Next Scheduled EDR Contact: 01/30/2012
	Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Historical Cleaners: EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/11/2009
Number of Days to Update: 16

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 10/28/2011
Next Scheduled EDR Contact: 12/05/2011
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 07/20/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 22

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/18/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2011
Date Data Arrived at EDR: 08/09/2011
Date Made Active in Reports: 09/16/2011
Number of Days to Update: 38

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/08/2011
Next Scheduled EDR Contact: 02/20/2012
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 06/24/2011
Date Made Active in Reports: 06/30/2011
Number of Days to Update: 6

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 08/11/2011
Date Data Arrived at EDR: 08/26/2011
Date Made Active in Reports: 09/14/2011
Number of Days to Update: 19

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 10/24/2011
Next Scheduled EDR Contact: 02/06/2012
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/15/2011
Number of Days to Update: 27

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: Rextag Strategies Corp.

Telephone: (281) 769-2247

U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Facility List

Source: Department of Public Welfare

Telephone: 717-783-3856

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

© 2010 Tele Atlas North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PITTSBURGH IAP ARS - 911TH AIRLIFT WING - T-RAMP
380-399 DEFENSE AVE
CORAOPOLIS, PA 15108

TARGET PROPERTY COORDINATES

Latitude (North):	40.49620 - 40° 29' 46.3"
Longitude (West):	80.2134 - 80° 12' 48.2"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	566657.5
UTM Y (Meters):	4482919.0
Elevation:	1149 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	40080-D2 OAKDALE, PA
Most Recent Revision:	1993
North Map:	40080-E2 AMBRIDGE, PA
Most Recent Revision:	1990

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

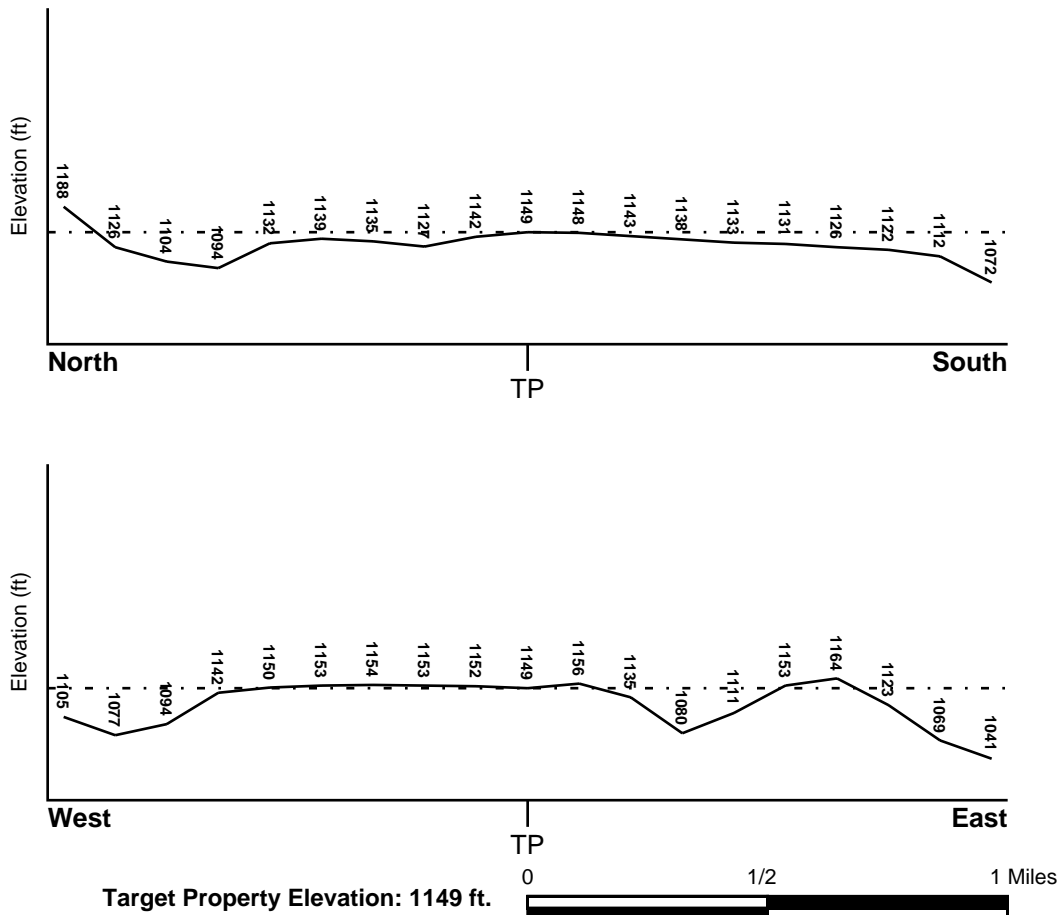
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Target Property County</u>	<u>FEMA Flood</u>
ALLEGHENY, PA	<u>Electronic Data</u>
	YES - refer to the Overview Map and Detail Map
Flood Plain Panel at Target Property:	42003C - FEMA DFIRM Flood data
Additional Panels in search area:	Not Reported

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic</u>
OAKDALE	<u>Data Coverage</u>
	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION</u>	<u>GENERAL DIRECTION</u>
1	<u>FROM TP</u>	<u>GROUNDWATER FLOW</u>
	1/4 - 1/2 Mile ESE	SW

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Pennsylvanian
Series:	Missourian Series
Code:	PP3 (<i>decoded above as Era, System & Series</i>)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: URBAN LAND

Soil Surface Texture: variable

Hydrologic Group: Not reported

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 10 inches

Depth to Bedrock Max: > 10 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: No Other Soil Types

Surficial Soil Types: No Other Soil Types

Shallow Soil Types: channery - silt loam
silty clay loam
silty clay
clay loam

Deeper Soil Types: weathered bedrock
channery - silt loam

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
---------------	----------------	-------------------------

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

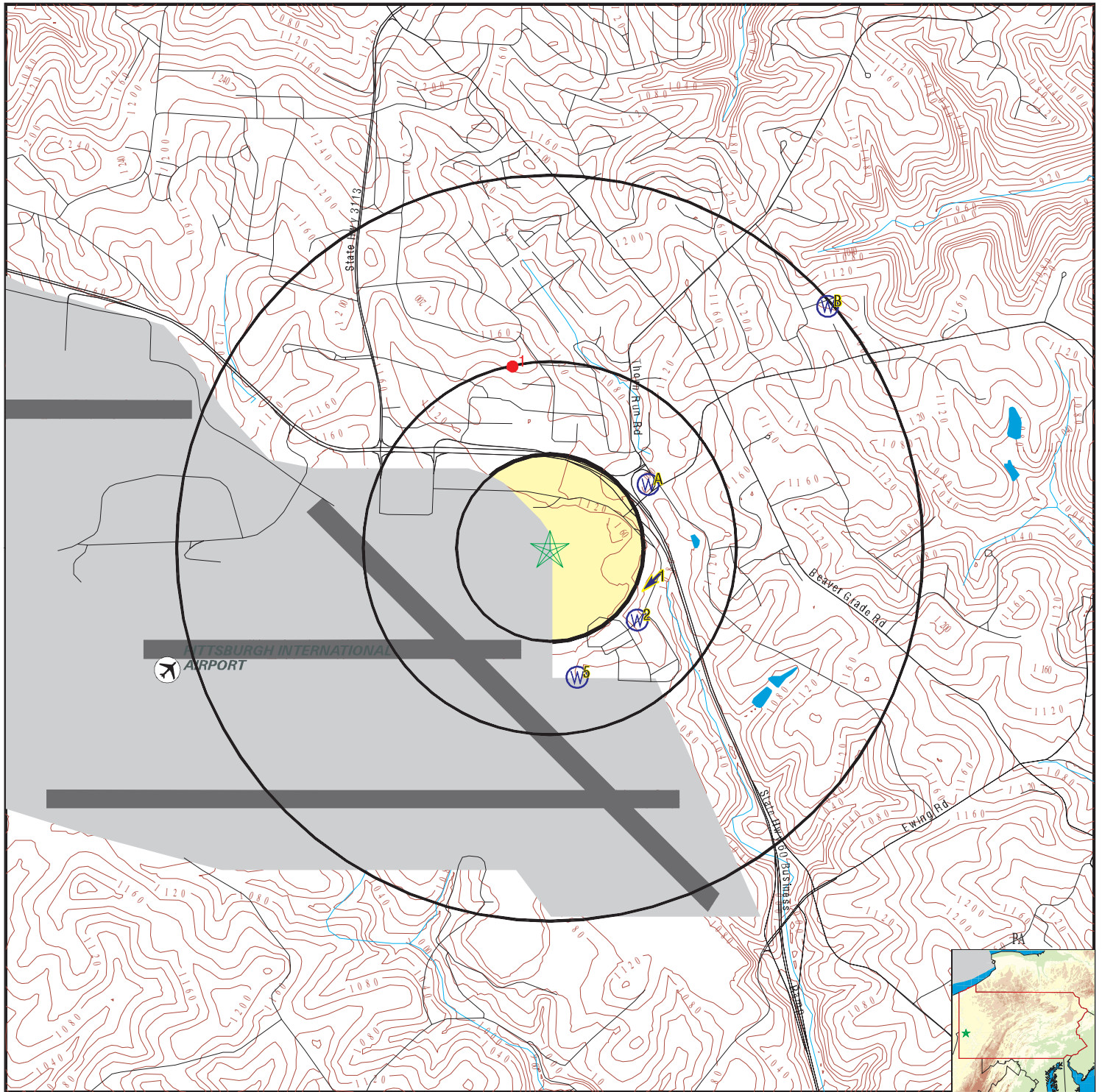
MAP ID	WELL ID	LOCATION FROM TP
2	PASI30000099522	1/4 - 1/2 Mile SE
A3	PASI30000099986	1/4 - 1/2 Mile ENE
A4	SPAW0002788	1/4 - 1/2 Mile ENE
5	PASI30000099323	1/4 - 1/2 Mile SSE
B6	SPAW0002770	1/2 - 1 Mile NE
B7	PASI30000100580	1/2 - 1 Mile NE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	PAOG30000019049	1/4 - 1/2 Mile NNW

PHYSICAL SETTING SOURCE MAP - 3206711.2s



County Boundary

Major Roads

Contour Lines

Airports

Earthquake epicenter, Richter 5 or greater

Water Wells

Public Water Supply Wells

Cluster of Multiple Icons

Groundwater Flow Direction

Indeterminate Groundwater Flow at Location

Groundwater Flow Varies at Location

Oil, gas or related wells

SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP
ADDRESS: 380-399 DEFENSE AVE
Coraopolis PA 15108
LAT/LONG: 40.4962 / 80.2134

CLIENT: Camp, Dresser & McKee, Inc.
CONTACT: Dan Depra
INQUIRY #: 3206711.2s
DATE: November 14, 2011 3:48 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1	Site ID:	02-81147		
ESE	Groundwater Flow:	SW	AQUIFLOW	46461
1/4 - 1/2 Mile	Shallowest Water Table Depth:	Not Reported		
Lower	Deepest Water Table Depth:	Not Reported		
	Average Water Table Depth:	Not Reported		
	Date:	01/27/1993		

2			PA WELLS	PASI30000099522
SE				
1/4 - 1/2 Mile				
Lower				

Dep counter:	0	Siteid:	402936080123301
Transactio:	1	Local welln:	AG 178
County:	ALLEGHENY	Latitude:	Not Reported
Longitude:	Not Reported	Aapg code:	321MRGN
Topography:	UPLAND DRAW	Well depth:	170
Elevation:	1110		
Elev method:	INTERPOLATED FROM TOPOGRAPHIC MAP		
Accuracy of elev:	10	Hydrologic:	05030101
Latlong acc:	ACCURATE TO +1 SECOND	Quad code:	OAKDALE
Type of site:	WELL	Date created:	11/09/1976
Date updated:	06/01/1990		
Data Reliability:	FIELD CHECKED BY REPORTING AGENCY (PaDAg pest. survey)		
Source Depth Data:	WELL OWNER		
Municipality:	MOON TWP.		
Latitude dd:	40.4933333333		
Longitude dd:	-80.2091666667		
Well address:	Not Reported		
Well zipcode:	Not Reported	Depth to bedrock:	0
Bedrock not:	0	Saltwaterz:	0
Date drilled:	01/01/1945	Pagwis id:	3254
Source site:	1	Local permit:	Not Reported
Latest owner:	810	Driller sc:	0
Latest prod:	31942	Latest well:	3254
Site id:	PASI30000099522		

A3			PA WELLS	PASI30000099986
ENE				
1/4 - 1/2 Mile				
Lower				

Dep counter:	0	Siteid:	Not Reported
Transactio:	0	Local welln:	X 0095
County:	ALLEGHENY	Latitude:	Not Reported
Longitude:	Not Reported	Aapg code:	321CNMG
Topography:	STREAM CHANNEL	Well depth:	75
Elevation:	0		
Elev method:	Not Reported		
Accuracy of elev:	Not Reported	Hydrologic:	Not Reported
Latlong acc:	ACCURATE TO +1 MINUTE	Quad code:	OAKDALE
Type of site:	WELL	Date created:	02/03/1999
Date updated:	02/04/1999		
Data Reliability:	LOCATION MAY NOT BE ACCURATE (WWI paper)		
Source Depth Data:	DRILLER'S RECORD		
Municipality:	MOON TWP.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Latitude dd:	40.4986111111		
Longitude dd:	-80.2086111111		
Well address:	Not Reported		
Well zipcode:	Not Reported	Depth to bedrock:	28
Bedrock not:	0	Saltwaterz:	0
Date drilled:	01/01/1966	Pagwis id:	47373
Source site:	2	Local permit:	Not Reported
Latest owner:	46818	Driller sc:	0
Latest prod:	48226	Latest well:	50069
Site id:	PASI30000099986		

A4 ENE 1/4 - 1/2 Mile Lower

PA WELLS SPAW0002788

Well ID:	X 0095	County	ALLEGHENY
Owner's Name:	F MCGARTLAND	Longitude:	801231
Latitude:	402955	Lat/Long Accuracy:	ACCURATE TO +1 MINUTE
Quadrangle:	OAKDALE	Topographic Setting:	STREAM CHANNEL
Hydrologic Unit:	Not Reported	Site Usage:	WITHDRAWAL
Water Usage:	DOMESTIC	Finish:	Not Reported
Well Depth:	75	Casing1 Diameter(inches):	6
Casing 1:	28	Casing2 Diameter(inches):	Not Reported
Casing2:	Not Reported	Date Drilled:	00-00-66
Grouted:	Not Reported	Production WL:	Not Reported
Static Water Level:	33	Yield Measurement Method:	Not Reported
Yield (gpm):	Not Reported	Test Time:	Not Reported
Drawdown:	Not Reported	Driller:	0730
Bedrock:	28	Water Bearing Zone 2:	35
Water Bearing Zone 1:	16	Lithology:	CLAY
Water Bearing Zone 3:	60	Remark:	1504
Municipality:	MOON		
Aquifer:	CONEMAUGH GROUP		

5 SSE 1/4 - 1/2 Mile Lower

PA WELLS PASI30000099323

Dep counter:	0	Siteid:	402928080124401
Transactio:	1	Local welln:	AG 179
County:	ALLEGHENY	Latitude:	Not Reported
Longitude:	Not Reported	Aapg code:	321MRGN
Topography:	HILLTOP	Well depth:	220
Elevation:	1110		
Elev method:	INTERPOLATED FROM TOPOGRAPHIC MAP		
Accuracy of elev:	10	Hydrologic:	05030101
Latlong acc:	ACCURATE TO +1 SECOND	Quad code:	OAKDALE
Type of site:	WELL	Date created:	11/09/1976
Date updated:	06/01/1990		
Data Reliability:	FIELD CHECKED BY REPORTING AGENCY (PaDAg pest. survey)		
Source Depth Data:	WELL OWNER		
Municipality:	MOON TWP.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Latitude dd:	40.4911111111		
Longitude dd:	-80.2122222222		
Well address:	Not Reported		
Well zipcode:	Not Reported	Depth to bedrock:	0
Bedrock not:	0	Saltwaterz:	0
Date drilled:	01/01/1945	Pagwis id:	3241
Source site:	1	Local permit:	Not Reported
Latest owner:	798	Driller sc:	0
Latest prod:	31939	Latest well:	3241
Site id:	PASI30000099323		

**B6
NE
1/2 - 1 Mile
Higher**

PA WELLS SPAW0002770

Well ID:	0432N	County	ALLEGHENY
Owner's Name:	ERITANO J.	Longitude:	801158
Latitude:	403020	Lat/Long Accuracy:	ACCURATE TO +10 SECONDS
Quadrangle:	AMBRIDGE	Topographic Setting:	HILLSIDE
Hydrologic Unit:	05030101	Site Usage:	WITHDRAWAL
Water Usage:	DOMESTIC	Finish:	PERFORATED OR SLOTTED
Well Depth:	200	Casing1 Diameter(inches):	6
Casing 1:	46	Casing2 Diameter(inches):	Not Reported
Casing2:	Not Reported	Date Drilled:	10-79
Grouted:	Not Reported	Production WL:	200
Static Water Level:	110	Yield Measurement Method:	B
Yield (gpm):	2.75	Test Time:	2
Drawdown:	90	Driller:	478
Bedrock:	42	Water Bearing Zone 2:	Not Reported
Water Bearing Zone 1:	120	Lithology:	SLATE
Water Bearing Zone 3:	Not Reported	Remark:	160'LINER
Municipality:	MOON		
Aquifer:	CONEMAUGH GROUP		

**B7
NE
1/2 - 1 Mile
Higher**

PA WELLS PASI30000100580

Dep counter:	0	Siteid:	Not Reported
Transactio:	0	Local welln:	0432N
County:	ALLEGHENY	Latitude:	Not Reported
Longitude:	Not Reported	Aapg code:	321CNMG
Topography:	HILLSIDE	Well depth:	200
Elevation:	0		
Elev method:	Not Reported	Hydrologic:	05030101
Accuracy of elev:	Not Reported	Quad code:	AMBRIDGE
Latlong acc:	ACCURATE TO +10 SECONDS	Date created:	02/03/1999
Type of site:	WELL		
Date updated:	02/04/1999		
Data Reliability:	LOCATION MAY NOT BE ACCURATE (WWI paper)		
Source Depth Data:	DRILLER'S RECORD		
Municipality:	MOON TWP.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Latitude dd:	40.5055555556	Depth to bedrock:	42
Longitude dd:	-80.1994444444	Saltwaterz:	0
Well address:	Not Reported	Pagwis id:	47355
Well zipcode:	Not Reported	Local permit:	Not Reported
Bedrock not:	0	Driller sc:	0
Date drilled:	10/01/1979	Latest well:	50051
Source site:	2		
Latest owner:	46800		
Latest prod:	48209		
Site id:	PASI30000100580		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1

NNW

OIL_GAS

PAOG30000019049

1/4 - 1/2 Mile

Organizati: TEVEBAUGH MGMT CO
Client nam: TEVEBAUGH MGMT CO
Site name: W A ROUSER 1 OG WELL
Primary fa: W A ROUSER 1
Client id: 24459
Primary 1: 6882
Sub facili: W A ROUSER 1
Sub faci 1: 20375
Primary 2: OIL & GAS LOCATION
Other faci: 003-00683
Sother fid: 003-00683
Site status: INACTIVE
Primary 4: PLUGGED OG WELL
Sub faci 3: PLUGGED OG WELL
Compliance: YES
Site id: PAOG30000019049

Primary 3: NONCOAL
Sub faci 2: WELL
Client rel: Owner

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: PA Radon

Radon Test Results

Zipcode	Num Tests	Min pCi/L	Max pCi/L	Avg pCi/L
15108	4117	0.1	604	6.4

EPA Region 3 Statistical Summary Readings for Zip Code: 15108

Number of sites tested: 714.

Maximum Radon Level: 73.5 pCi/L.

Minimum Radon Level: 0.5 pCi/L.

pCi/L <4	pCi/L 4-10	pCi/L 10-20	pCi/L 20-50	pCi/L 50-100	pCi/L >100
355 (49.72%)	194 (27.17%)	105 (14.71%)	53 (7.42%)	7 (0.98%)	0 (0.00%)

Federal EPA Radon Zone for ALLEGHENY County: 1

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Pennsylvania Public Water Supply Wells

Source: Pennsylvania Department of Environmental Resources Bureau of Water Supply

Telephone: 717-787-5017

Pennsylvania Groundwater Information System

Source: Department of Conservation and Natural Resources

Telephone: 717-702-2045

OTHER STATE DATABASE INFORMATION

Pennsylvania Oil and Gas Locations

Source: Pennsylvania Department of Environmental Protection

Telephone: 814-863-0104

An Oil and Gas Location is a DEP primary facility type related to the Oil & Gas Program. The sub-facility types related to Oil and Gas that are included in this layer are: Land Application -- An area where drilling cuttings or waste are disposed by land application; Well -- A well associated with oil and/or gas production; Pit -- An approved pit that is used for storage of oil and gas well fluids. Some sub facility types are not included in this layer due to security policies.

RADON

State Database: PA Radon

Source: Department of Environmental Protection

Telephone: 717-783-3594

Radon Test Results Statistics by Zip Code

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Region 3 Statistical Summary Readings

Source: Region 3 EPA

Telephone: 215-814-2082

Radon readings for Delaware, D.C., Maryland, Pennsylvania, Virginia and West Virginia.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

STREET AND ADDRESS INFORMATION

© 2010 Tele Atlas North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP

380-399 DEFENSE AVE

Coraopolis, PA 15108

Inquiry Number: 3206711.5

November 15, 2011

The EDR Aerial Photo Decade Package

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report AS IS. Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2011 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Date EDR Searched Historical Sources:

Aerial Photography November 15, 2011

Target Property:

380-399 DEFENSE AVE

Coraopolis, PA 15108

<u><i>Year</i></u>	<u><i>Scale</i></u>	<u><i>Details</i></u>	<u><i>Source</i></u>
1938	Aerial Photograph. Scale: 1"=500'	Panel #: 40080-D2, Oakdale, PA;/Flight Date: November 09, 1938	EDR
1949	Aerial Photograph. Scale: 1"=500'	Panel #: 40080-D2, Oakdale, PA;/Flight Date: October 23, 1949	EDR
1959	Aerial Photograph. Scale: 1"=1000'	Panel #: 40080-D2, Oakdale, PA;/Flight Date: October 29, 1959	EDR
1967	Aerial Photograph. Scale: 1"=500'	Panel #: 40080-D2, Oakdale, PA;/Flight Date: May 26, 1967	EDR
1973	Aerial Photograph. Scale: 1"=500'	Panel #: 40080-D2, Oakdale, PA;/Flight Date: April 14, 1973	EDR
1975	Aerial Photograph. Scale: 1"=500'	Panel #: 40080-D2, Oakdale, PA;/Flight Date: May 11, 1975	EDR
1982	Aerial Photograph. Scale: 1"=1000'	Panel #: 40080-D2, Oakdale, PA;/Flight Date: November 07, 1982	EDR
1988	Aerial Photograph. Scale: 1"=750'	Panel #: 40080-D2, Oakdale, PA;/Flight Date: June 21, 1988	EDR
1993	Aerial Photograph. Scale: 1"=500'	Panel #: 40080-D2, Oakdale, PA;/Composite DOQQ - acquisition dates: April 07, 1993	EDR
2005	Aerial Photograph. Scale: 1"=500'	Panel #: 40080-D2, Oakdale, PA;/Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=500'	Panel #: 40080-D2, Oakdale, PA;/Flight Year: 2006	EDR
2008	Aerial Photograph. Scale: 1"=500'	Panel #: 40080-D2, Oakdale, PA;/Flight Year: 2008	EDR



INQUIRY #: 3206711.5

YEAR: 1938

| = 500'



INQUIRY #: 3206711.5

YEAR: 1949



| = 500'





INQUIRY #: 3206711.5

YEAR: 1959

| = 1000'





INQUIRY #: 3206711.5

YEAR: 1967

| = 500'





INQUIRY #: 3206711.5

YEAR: 1973

| = 500'





INQUIRY #: 3206711.5

YEAR: 1975

| = 500'





INQUIRY #: 3206711.5

YEAR: 1982

| = 1000'





INQUIRY #: 3206711.5

YEAR: 1988

| = 750'





INQUIRY #: 3206711.5

YEAR: 1993

| = 500'





INQUIRY #: 3206711.5

YEAR: 2005

| = 500'





INQUIRY #: 3206711.5

YEAR: 2006

| = 500'





INQUIRY #: 3206711.5

YEAR: 2008

| = 500'



Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP

380-399 DEFENSE AVE
Coraopolis, PA 15108

Inquiry Number: 3206711.9
November 14, 2011

EDR Building Permit Report

Target Property and Adjoining Properties

EDR Building Permit Report: Search Documentation

11/14/11

Site Name:

Pittsburgh IAP ARS
380-399 DEFENSE
Coraopolis, PA 15108

Client Name:

Camp, Dresser & McKee, Inc.
2740 Smallman Street
Pittsburgh, PA 15222

EDR Inquiry # 3206711.9

Contact: Dan Depra



Search Documentation

DATA GAP

The complete collection of Building Permit data available to EDR has been searched, and as of 11/14/11, EDR does not have access to building permits in the city where your target property is located (Coraopolis, PA).

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2011 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-05 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records – The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquiries (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.



Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP

380-399 DEFENSE AVE

Coraopolis, PA 15108

Inquiry Number: 3206711.3

November 14, 2011

Certified Sanborn® Map Report

Certified Sanborn® Map Report

11/14/11

Site Name:

Pittsburgh IAP ARS - 911th
380-399 DEFENSE AVE
Coraopolis, PA 15108

Client Name:

Camp, Dresser & McKee, Inc.
2740 Smallman Street
Pittsburgh, PA 15222



EDR Inquiry # 3206711.3

Contact: Dan Depra

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Camp, Dresser & McKee, Inc. were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: Pittsburgh IAP ARS - 911th Airlift Wing - T-
Address: 380-399 DEFENSE AVE
City, State, Zip: Coraopolis, PA 15108
Cross Street:
P.O. # NA
Project: 911th Airlift Wing - T/RAMP EA
Certification # 991E-410D-BD89



Sanborn® Library search results
Certification # 991E-410D-BD89

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☒ Library of Congress
- ☒ University Publications of America
- ☒ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

Camp, Dresser & McKee, Inc. (the client) is permitted to make up to THREE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2011 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP

380-399 DEFENSE AVE

Coraopolis, PA 15108

Inquiry Number: 3206711.4

November 15, 2011

EDR Historical Topographic Map Report

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

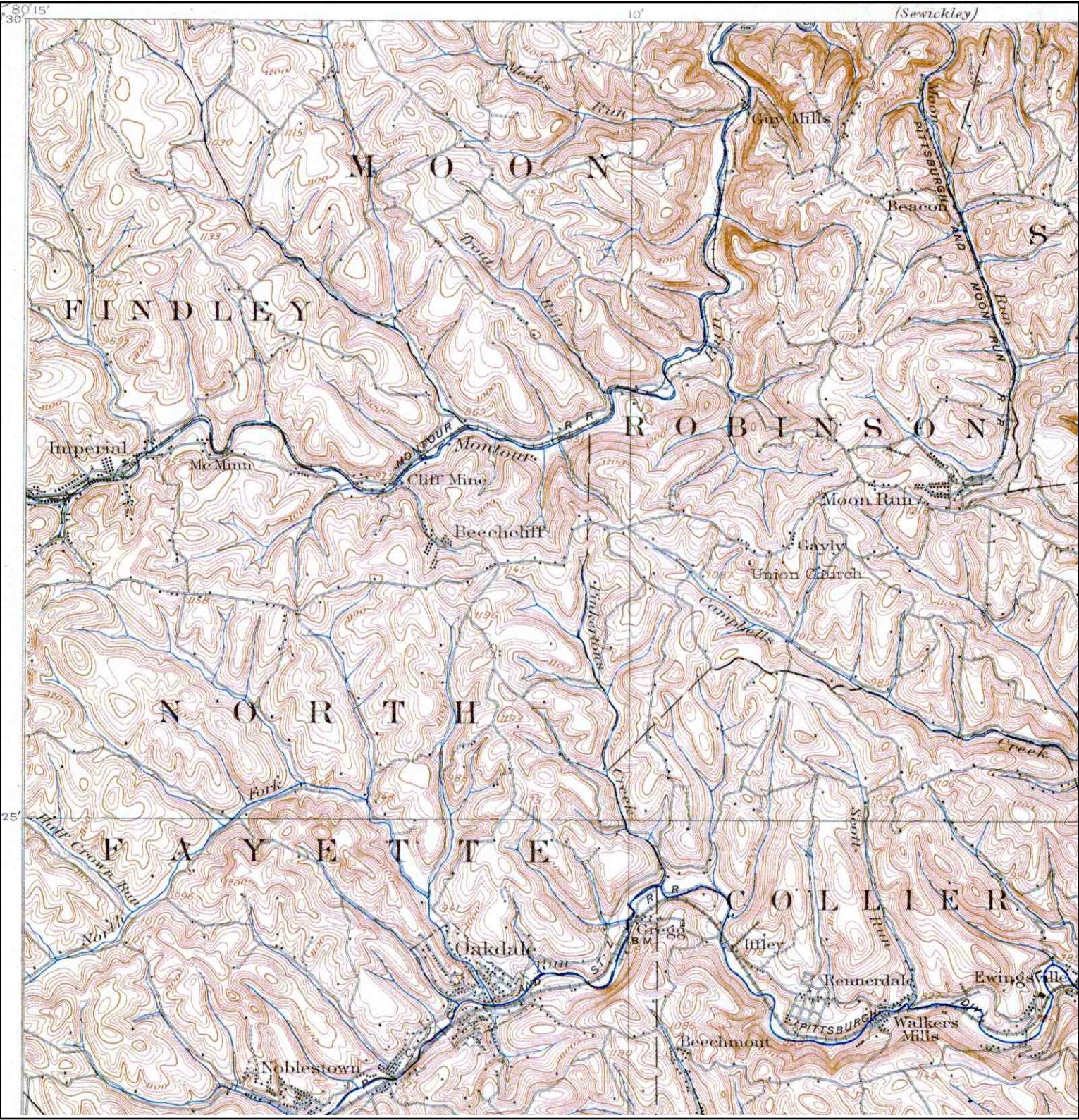
Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report AS IS. Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2011 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

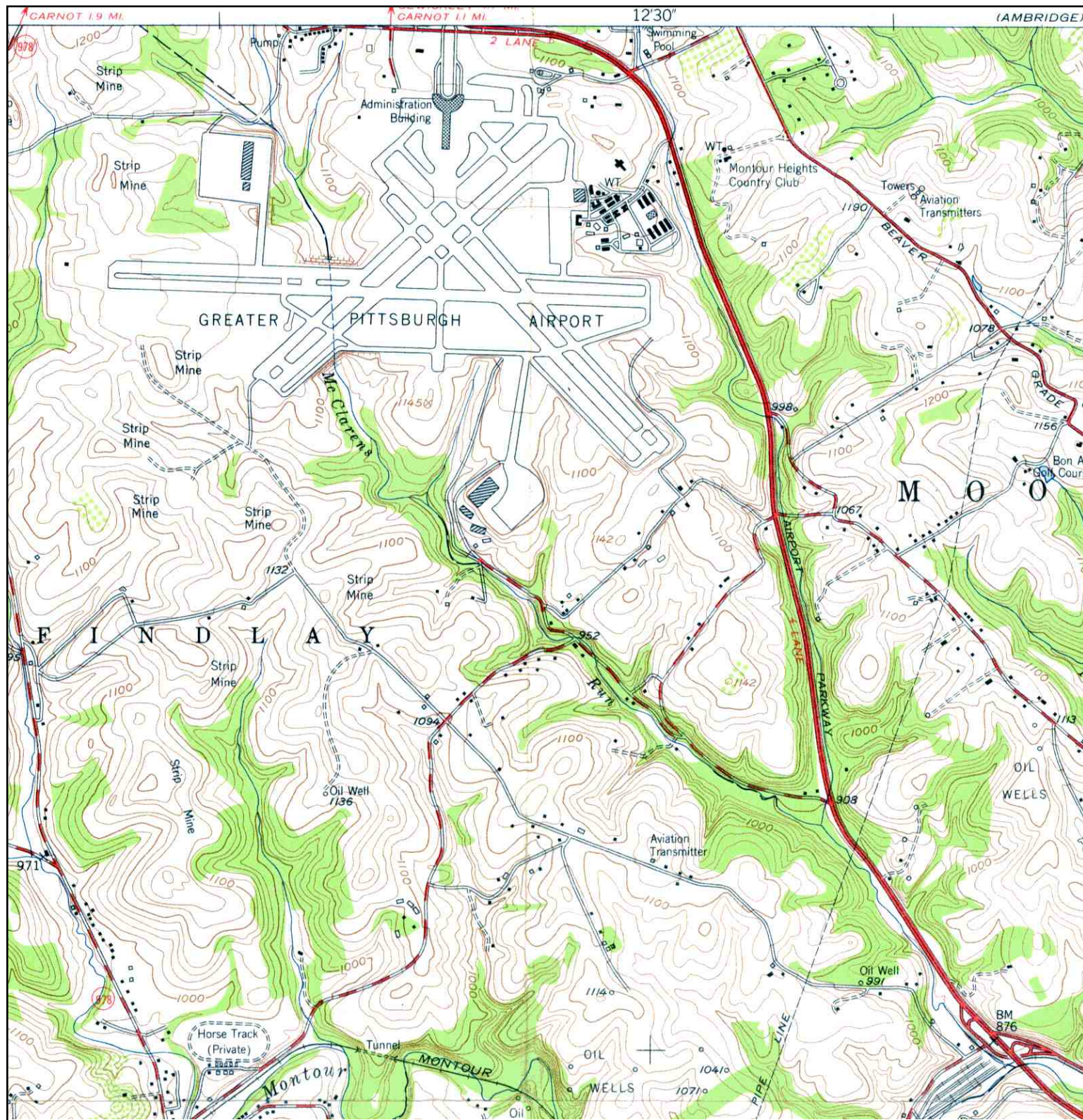
EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.


Historical Topographic Map



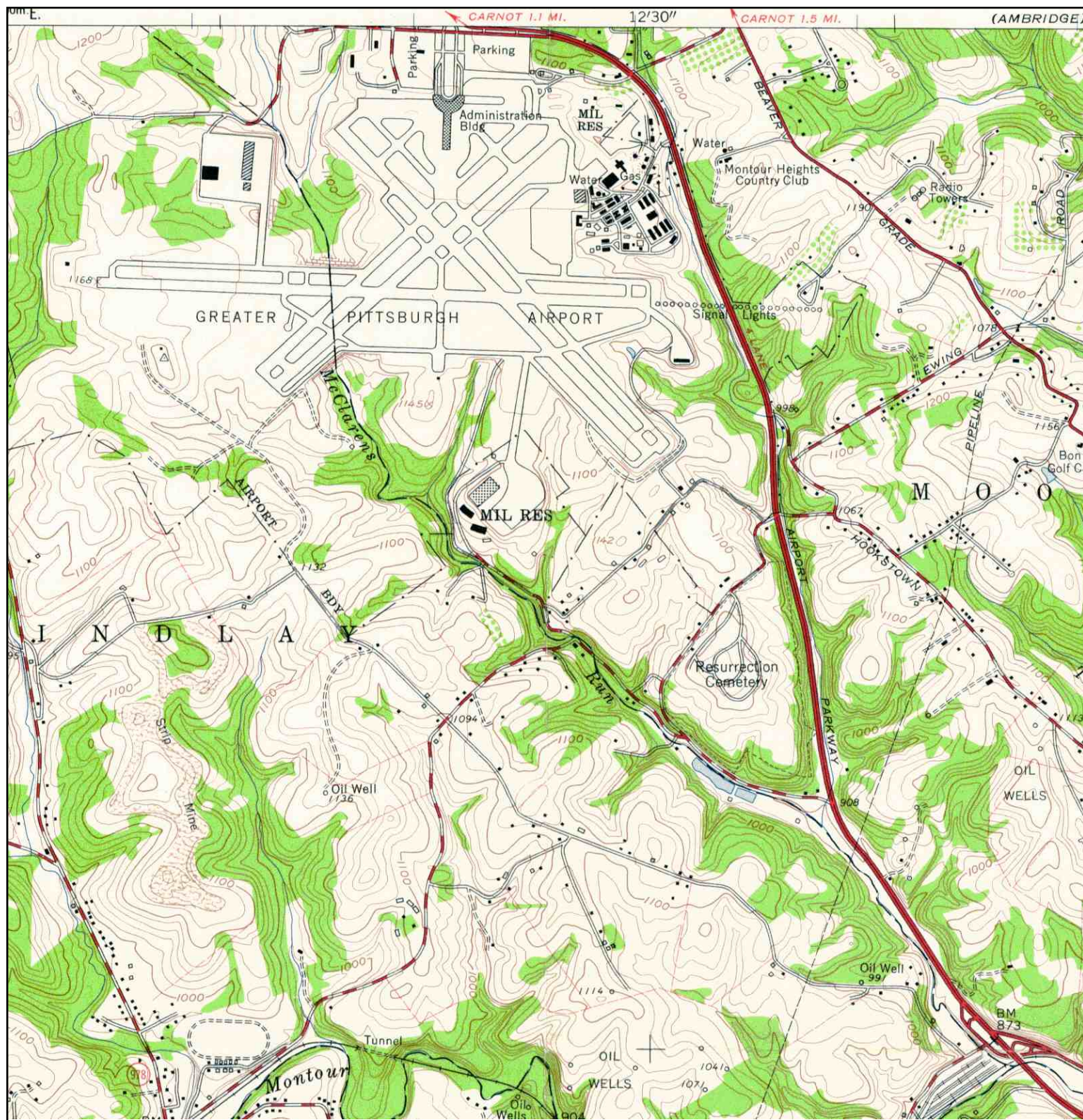
<div><div>N</div><div>▲</div></div>	TARGET QUAD	SITE NAME:	Pittsburgh IAP ARS - 911th	CLIENT:	Camp, Dresser & McKee, Inc.
	NAME: CARNEGIE		Airlift Wing - T-RAMP	CONTACT:	Dan Depra
	MAP YEAR: 1906	ADDRESS:	380-399 DEFENSE AVE	INQUIRY#:	3206711.4
			Coraopolis, PA 15108	RESEARCH DATE:	11/15/2011
	SERIES: 15	LAT/LONG:	40.4962 / -80.2134		
	SCALE: 1:62500				


Historical Topographic Map



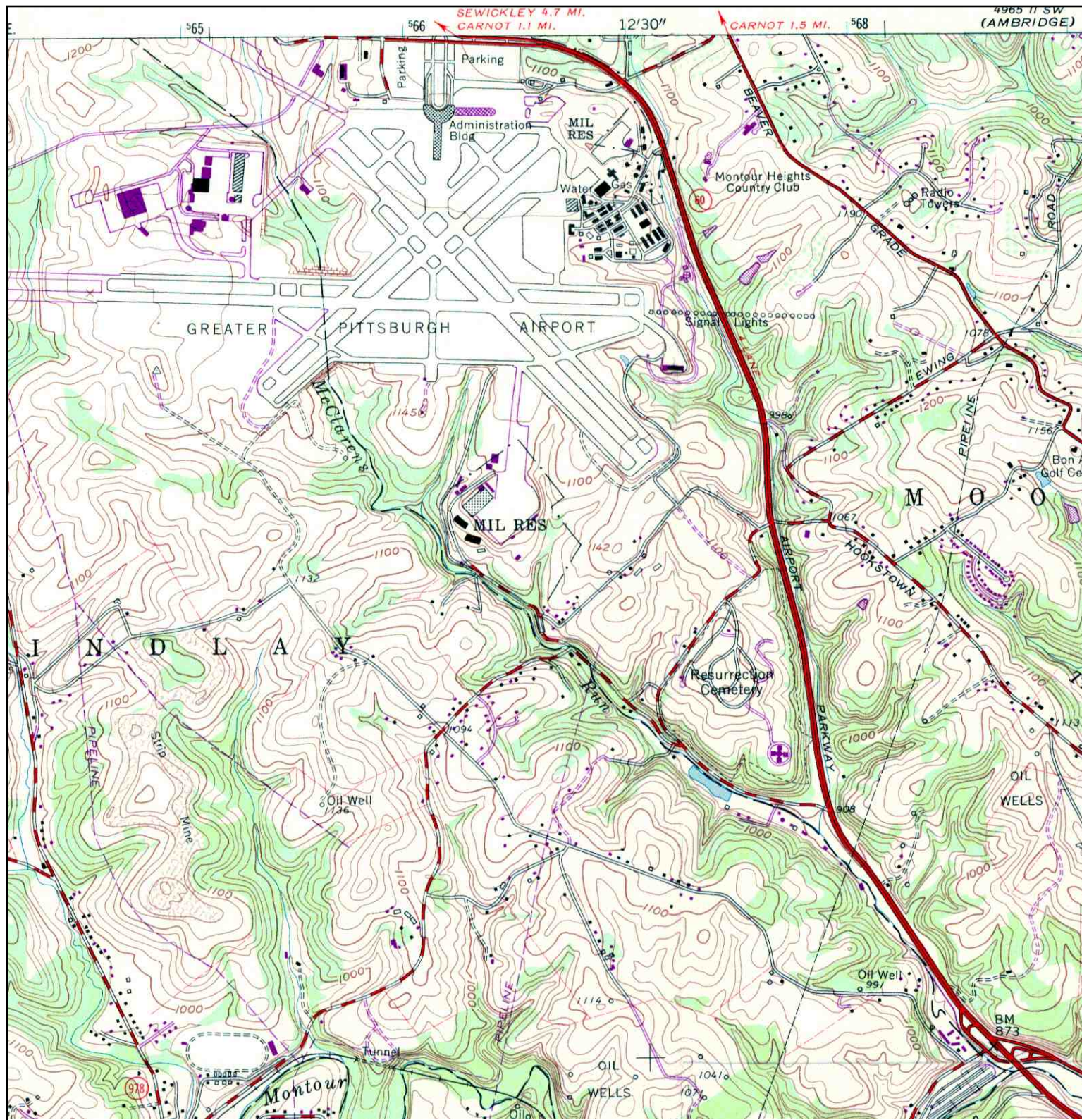
	TARGET QUAD	SITE NAME:	Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP	CLIENT:	Camp, Dresser & McKee, Inc.
	NAME:	ADDRESS:	380-399 DEFENSE AVE	CONTACT:	Dan Depra
	MAP YEAR:	LAT/LONG:	Coraopolis, PA 15108	INQUIRY#:	3206711.4
	SERIES:		40.4962 / -80.2134	RESEARCH DATE:	11/15/2011
	SCALE:				

Historical Topographic Map



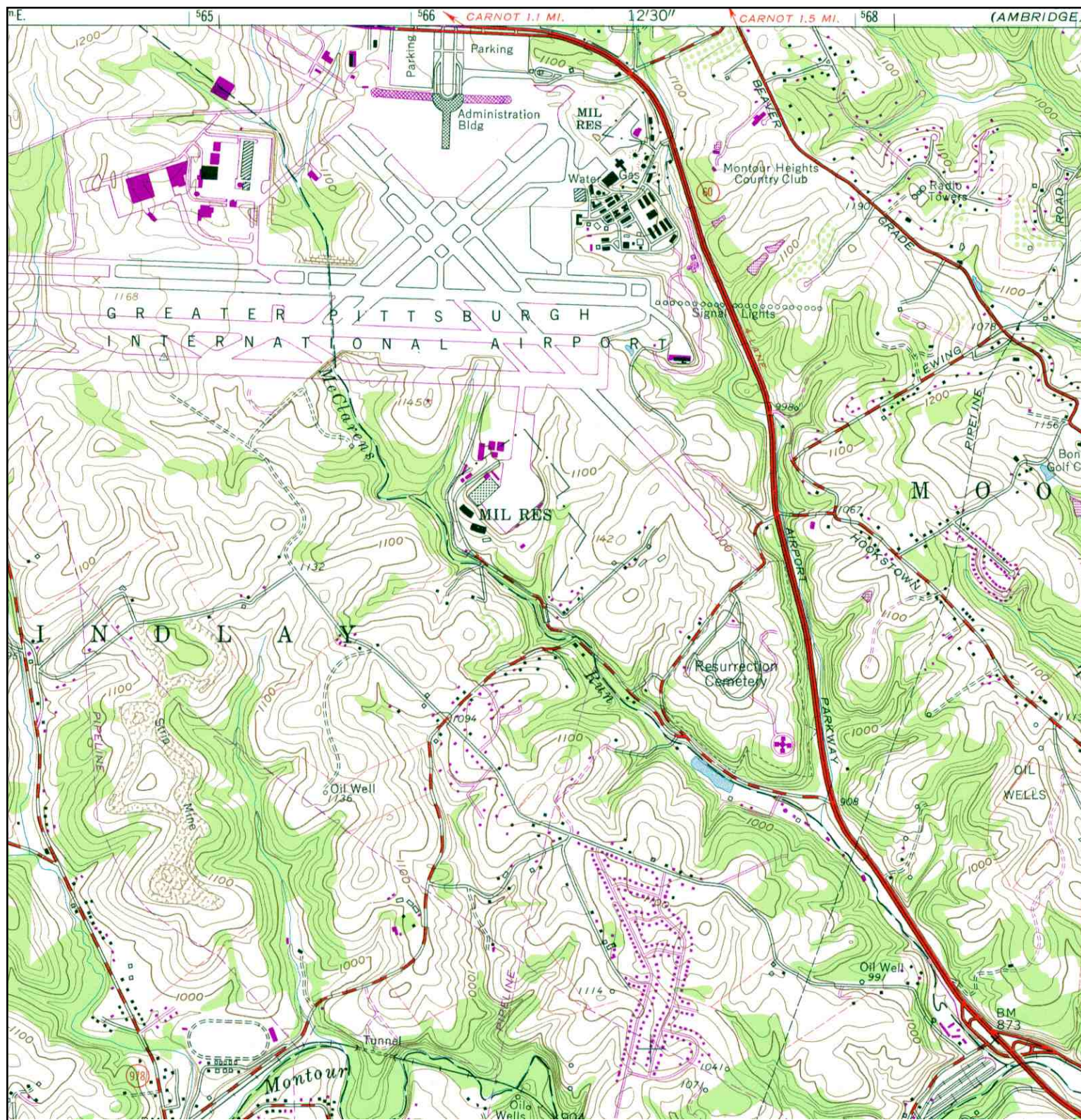
	TARGET QUAD	SITE NAME:	Pittsburgh IAP ARS - 911th	CLIENT:	Camp, Dresser & McKee, Inc.
	NAME:	ADDRESS:	Airlift Wing - T-RAMP	CONTACT:	Dan Depra
	MAP YEAR:		380-399 DEFENSE AVE	INQUIRY#:	3206711.4
			Coraopolis, PA 15108	RESEARCH DATE:	11/15/2011
	SERIES:	LAT/LONG:	40.4962 / -80.2134		
	SCALE:				
	7.5				
	1:24000				

Historical Topographic Map



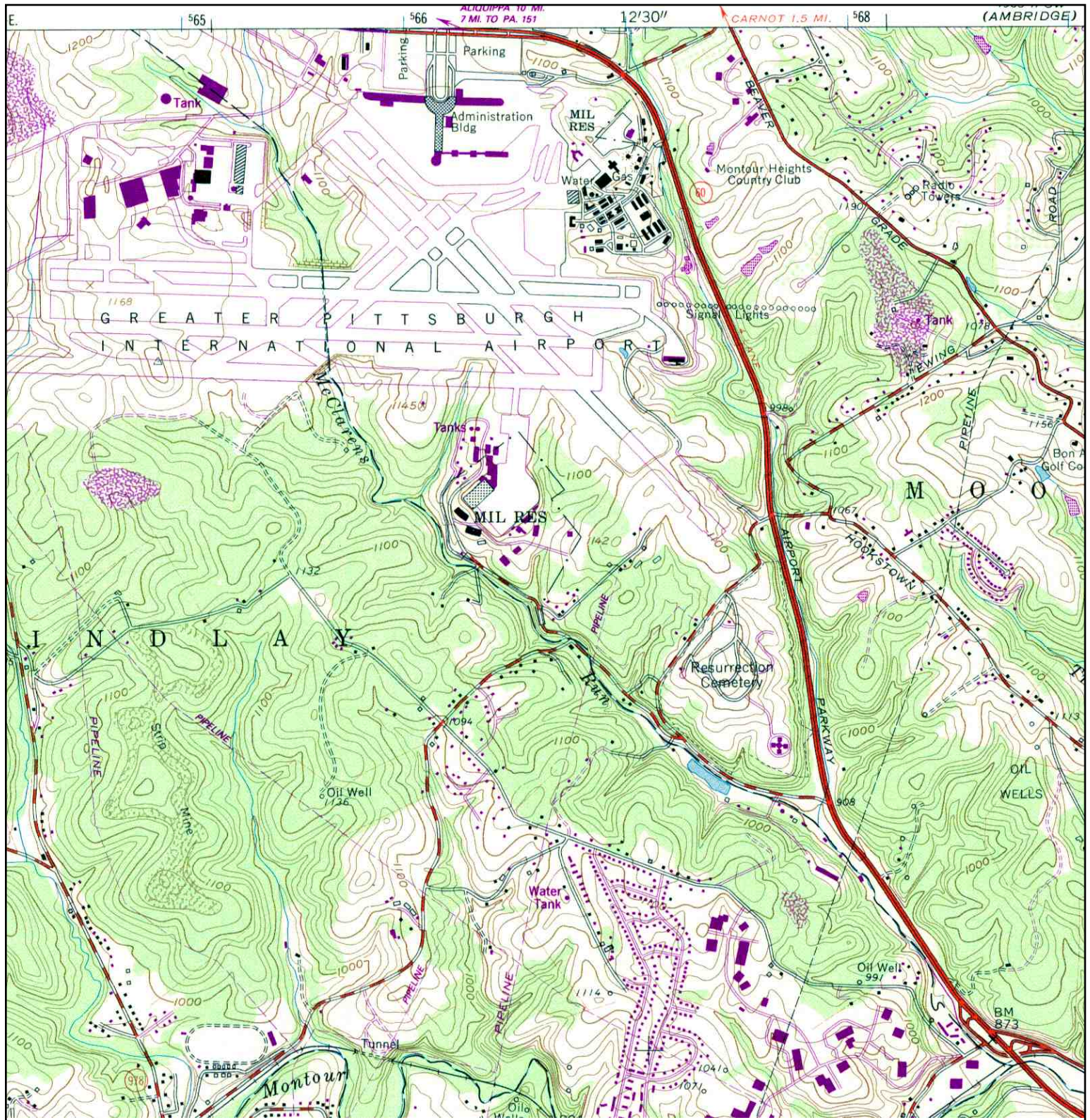
<p>N ↑</p>	<p>TARGET QUAD NAME: OAKDALE MAP YEAR: 1969 PHOTOREVISED: 1960 SERIES: 7.5 SCALE: 1:24000</p>	<p>SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP ADDRESS: 380-399 DEFENSE AVE Coraopolis, PA 15108 LAT/LONG: 40.4962 / -80.2134</p>	<p>CLIENT: Camp, Dresser & McKee, Inc. CONTACT: Dan Depra INQUIRY#: 3206711.4 RESEARCH DATE: 11/15/2011</p>
----------------	--	---	--

Historical Topographic Map



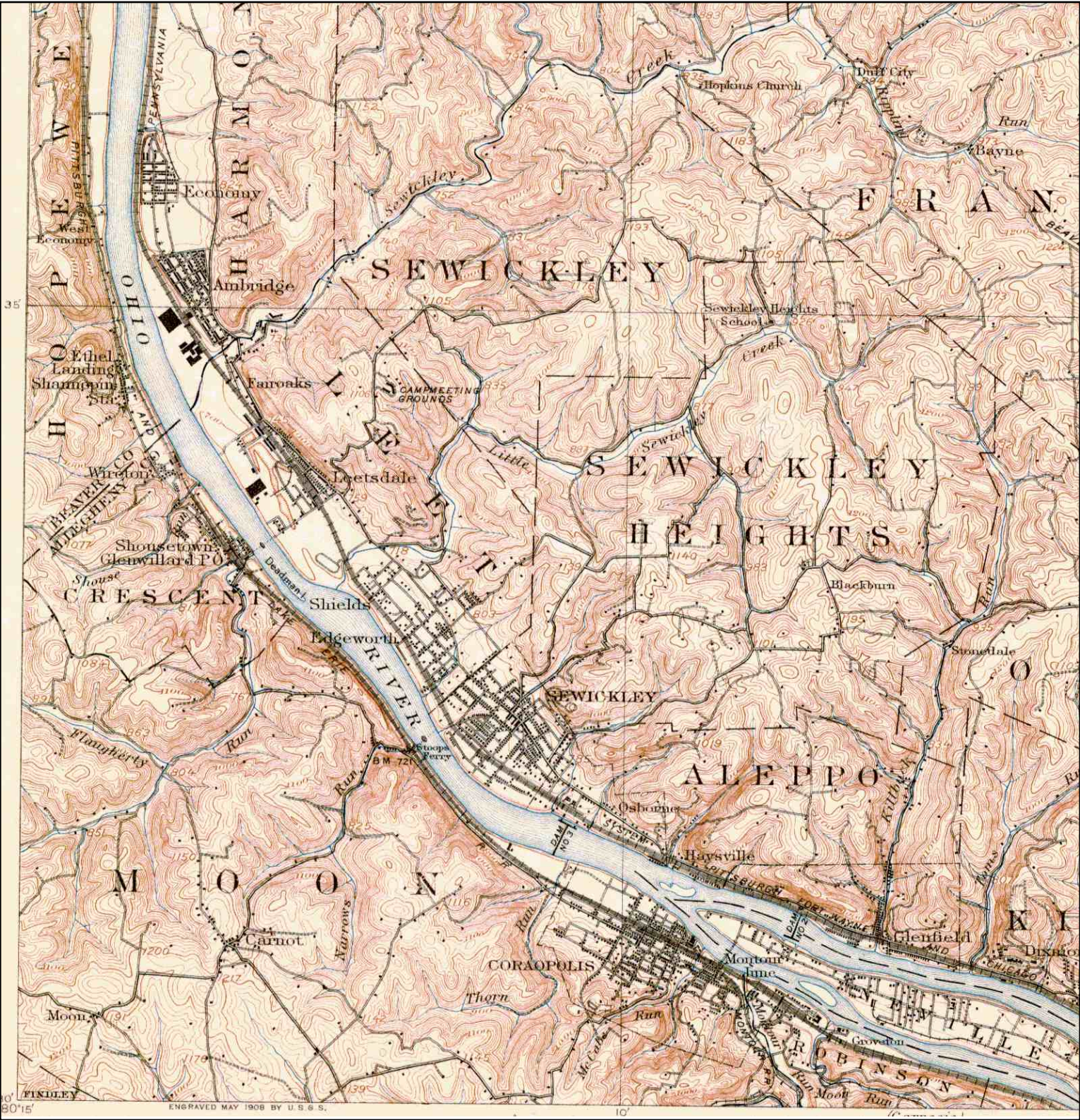
<p>N ↑</p>	<p>TARGET QUAD NAME: OAKDALE MAP YEAR: 1979 PHOTOREVISED: 1960 SERIES: 7.5 SCALE: 1:24000</p>	<p>SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP ADDRESS: 380-399 DEFENSE AVE Coraopolis, PA 15108 LAT/LONG: 40.4962 / -80.2134</p>	<p>CLIENT: Camp, Dresser & McKee, Inc. CONTACT: Dan Depra INQUIRY#: 3206711.4 RESEARCH DATE: 11/15/2011</p>
----------------	--	--	--

Historical Topographic Map



<p>N ↑</p>	<p>TARGET QUAD NAME: OAKDALE MAP YEAR: 1990 PHOTOREVISED: 1960 SERIES: 7.5 SCALE: 1:24000</p>	<p>SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP ADDRESS: 380-399 DEFENSE AVE Coraopolis, PA 15108 LAT/LONG: 40.4962 / -80.2134</p>	<p>CLIENT: Camp, Dresser & McKee, Inc. CONTACT: Dan Depra INQUIRY#: 3206711.4 RESEARCH DATE: 11/15/2011</p>
----------------	--	--	--

Historical Topographic Map



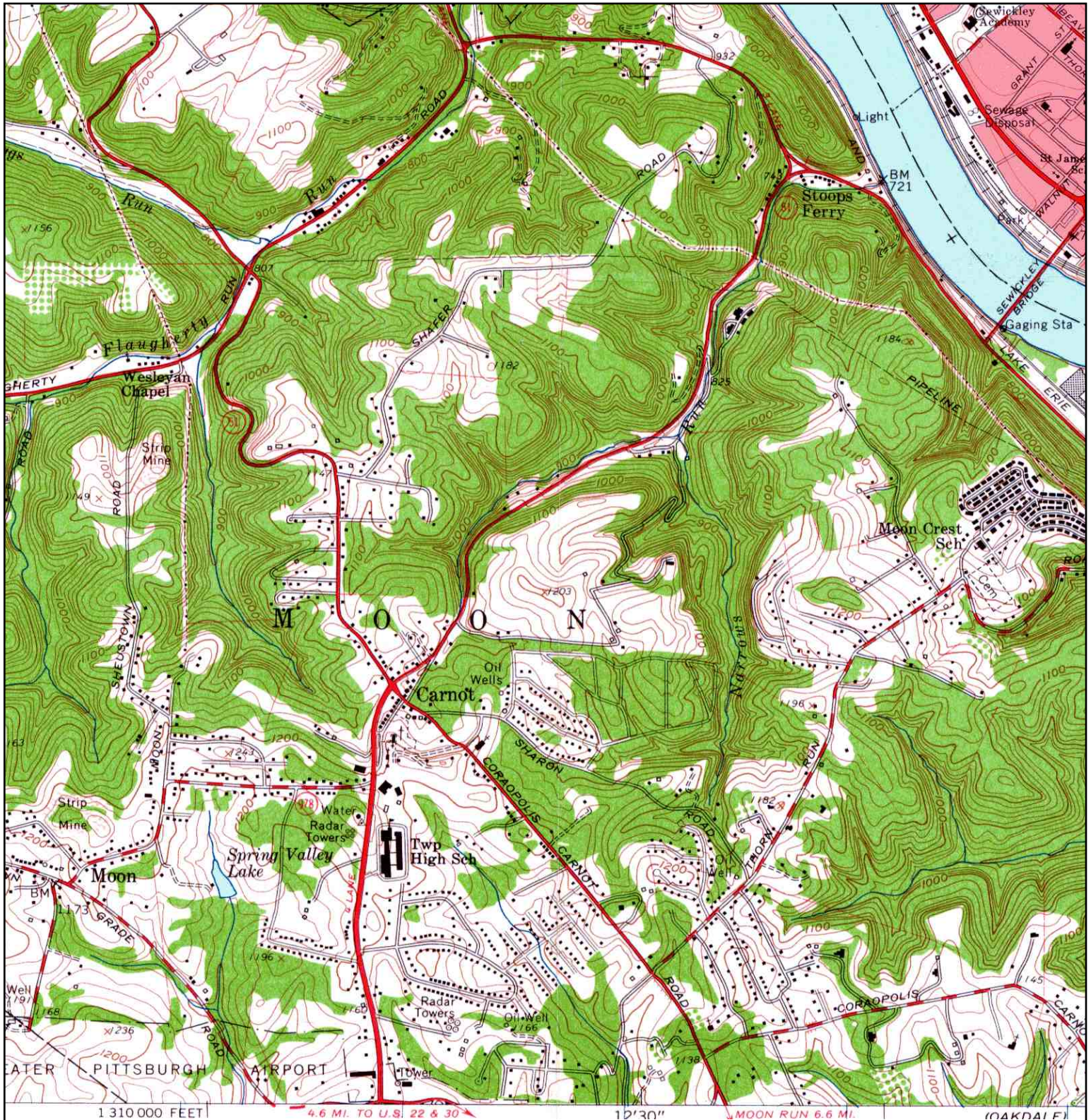
<div><div>N</div><div>↑</div></div>	ADJOINING QUAD	SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP ADDRESS: 380-399 DEFENSE AVE Coraopolis, PA 15108 LAT/LONG: 40.4962 / -80.2134	CLIENT: Camp, Dresser & McKee, Inc. CONTACT: Dan Depra INQUIRY#: 3206711.4 RESEARCH DATE: 11/15/2011
	NAME: SEWICKLEY		
	MAP YEAR: 1908		
	SERIES: 15		
	SCALE: 1:62500		

Historical Topographic Map



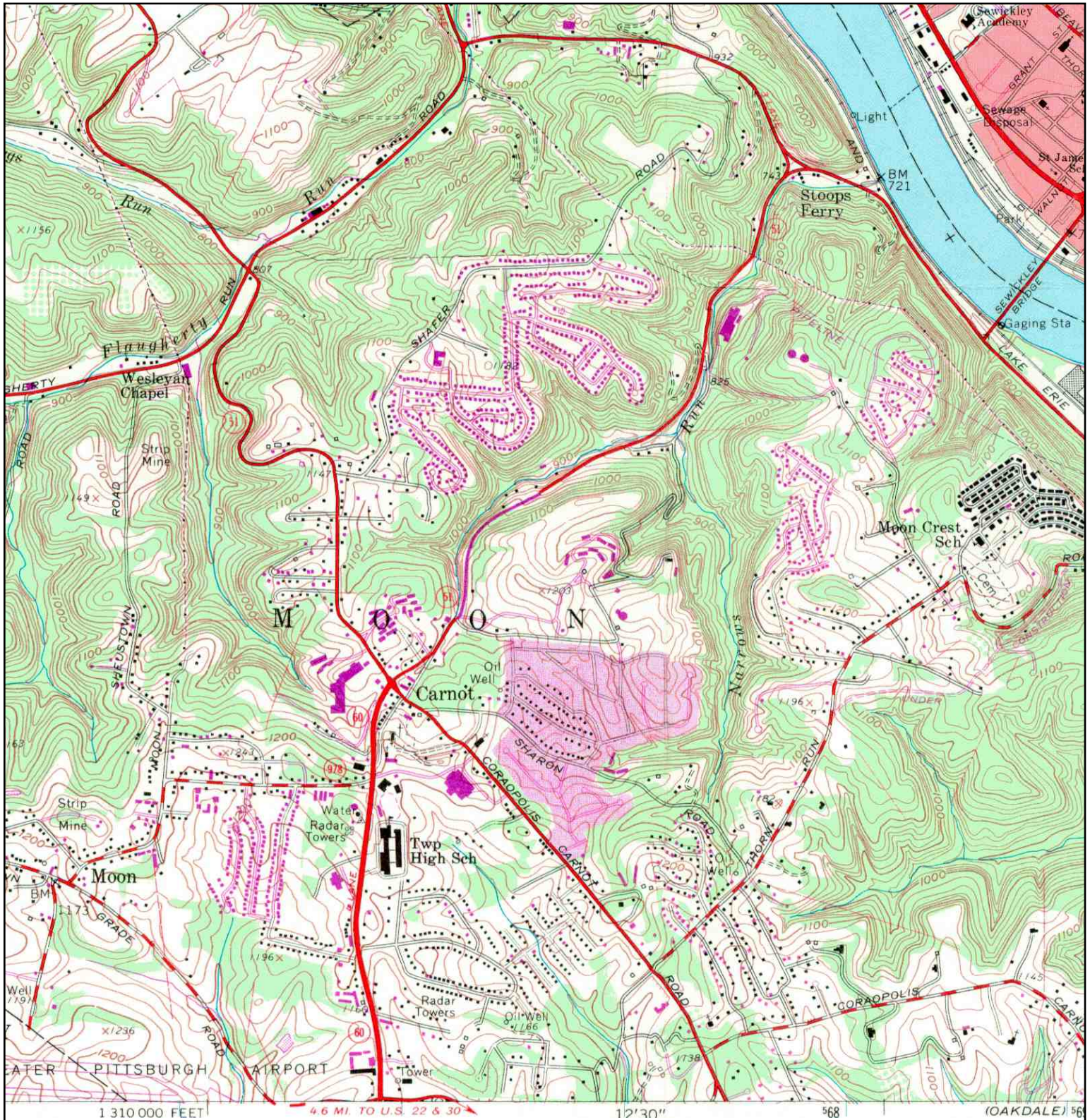
<div>N</div> <div>↑</div>	ADJOINING QUAD		<div>SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP</div> <div>ADDRESS: 380-399 DEFENSE AVE Coraopolis, PA 15108</div> <div>LAT/LONG: 40.4962 / -80.2134</div>	<div>CLIENT: Camp, Dresser & McKee, Inc.</div> <div>CONTACT: Dan Depra</div> <div>INQUIRY#: 3206711.4</div> <div>RESEARCH DATE: 11/15/2011</div>
	NAME: AMBRIDGE			
	MAP YEAR: 1953			
	SERIES: 7.5			
	SCALE: 1:24000			

Historical Topographic Map



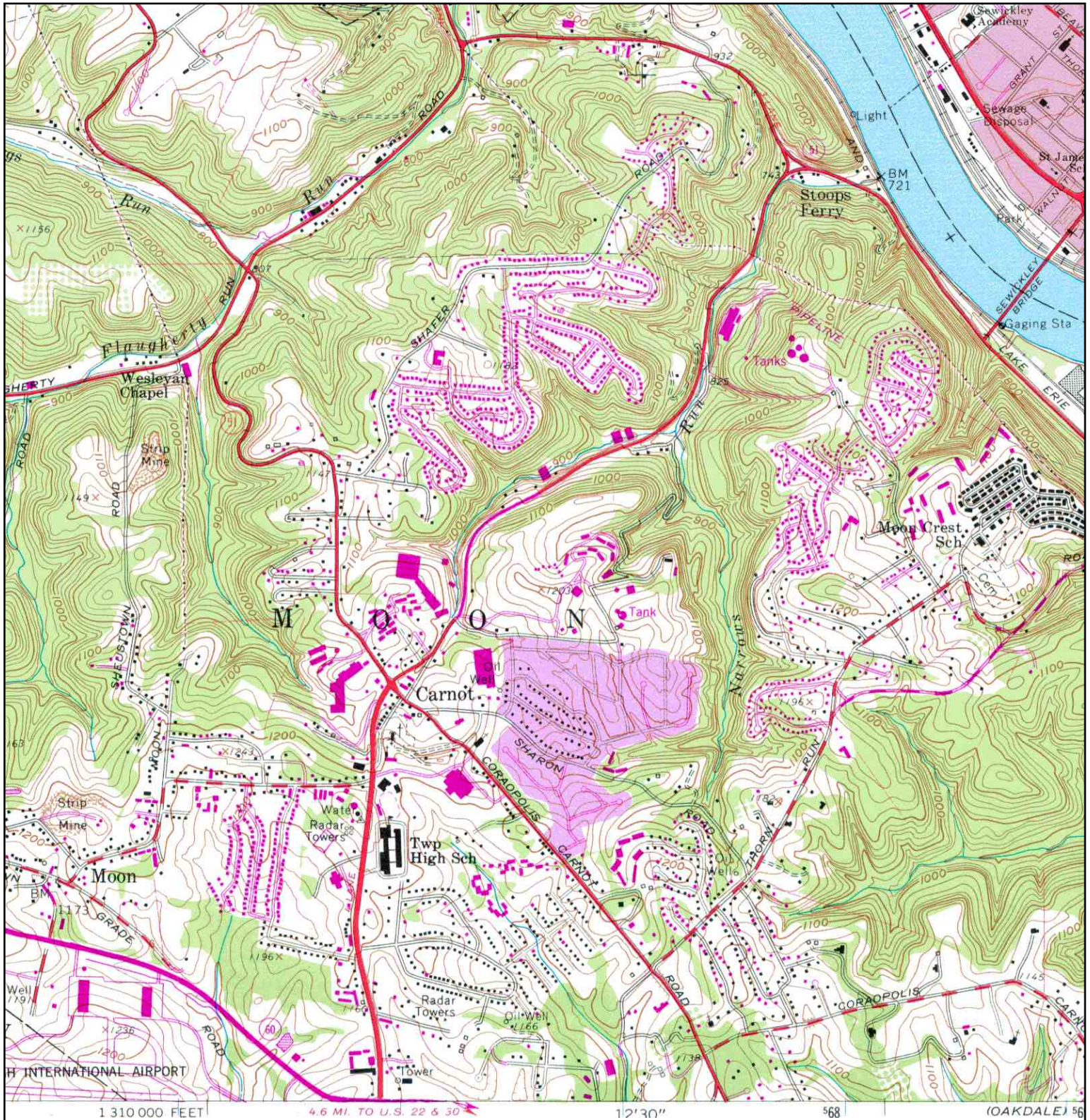
<div data-bbox="71 1822 103 1921"> </div>	ADJOINING QUAD NAME: AMBRIDGE MAP YEAR: 1960 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP ADDRESS: 380-399 DEFENSE AVE Coraopolis, PA 15108 LAT/LONG: 40.4962 / -80.2134	CLIENT: Camp, Dresser & McKee, Inc. CONTACT: Dan Depra INQUIRY#: 3206711.4 RESEARCH DATE: 11/15/2011

Historical Topographic Map



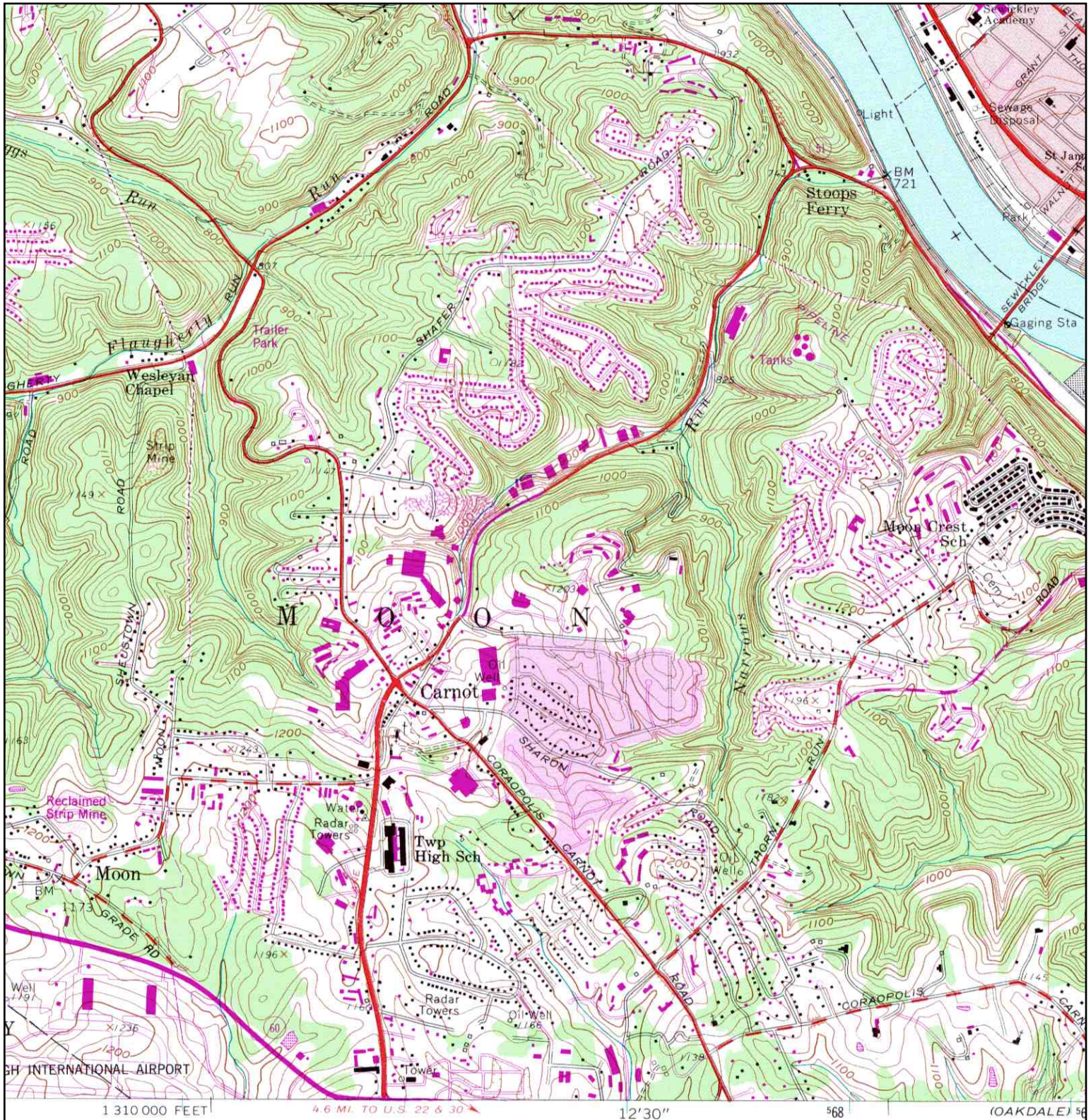
<div data-bbox="69 1822 102 1927"> </div>	<p>ADJOINING QUAD</p> <p>NAME: AMBRIDGE</p> <p>MAP YEAR: 1969</p> <p>PHOTOREVISED: 1960</p> <p>SERIES: 7.5</p> <p>SCALE: 1:24000</p>	<p>SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP</p> <p>ADDRESS: 380-399 DEFENSE AVE Coraopolis, PA 15108</p> <p>LAT/LONG: 40.4962 / -80.2134</p>	<p>CLIENT: Camp, Dresser & McKee, Inc.</p> <p>CONTACT: Dan Depra</p> <p>INQUIRY#: 3206711.4</p> <p>RESEARCH DATE: 11/15/2011</p>
---	---	--	--

Historical Topographic Map



<p>N ↑</p>	<p>ADJOINING QUAD NAME: AMBRIDGE MAP YEAR: 1979 PHOTOREVISED: 1960 SERIES: 7.5 SCALE: 1:24000</p>	<p>SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP ADDRESS: 380-399 DEFENSE AVE Coraopolis, PA 15108 LAT/LONG: 40.4962 / -80.2134</p>	<p>CLIENT: Camp, Dresser & McKee, Inc. CONTACT: Dan Depra INQUIRY#: 3206711.4 RESEARCH DATE: 11/15/2011</p>
----------------	---	--	--

Historical Topographic Map



<div data-bbox="69 1822 102 1927"> </div>	ADJOINING QUAD NAME: AMBRIDGE MAP YEAR: 1990 PHOTOREVISED: 1960 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP ADDRESS: 380-399 DEFENSE AVE Coraopolis, PA 15108 LAT/LONG: 40.4962 / -80.2134	CLIENT: Camp, Dresser & McKee, Inc. CONTACT: Dan Depra INQUIRY#: 3206711.4 RESEARCH DATE: 11/15/2011
---	--	---	---

VAPOR ENCROACHMENT SCREEN

Prepared by: Camp, Dresser & McKee, Inc.

11/17/2011

TABLE OF CONTENTS

Executive Summary

Primary Map

Aerial Photography:

Map Findings

Disclaimer - Copyright and Trademark Notice

The EDR Vapor Encroachment Worksheet enables EDR's customers to make certain online modifications that effects maps, text and calculations contained in this Report. As a result, maps, text and calculations contained in this Report may have been so modified. EDR has not taken any action to verify any such modifications, and this report and the findings set forth herein must be read in light of this fact. Environmental Data Resources shall not be responsible for any customer's decision to include or not include in any final report any records determined to be within the relevant minimum search distances.

This report contains information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.**

Purchaser accepts this report "AS IS". Any analyses, estimates, ratings, or risk codes provided in this report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can produce information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2011 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

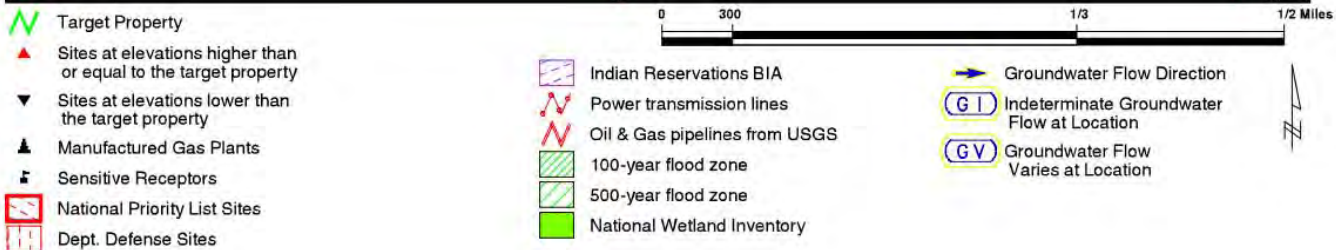
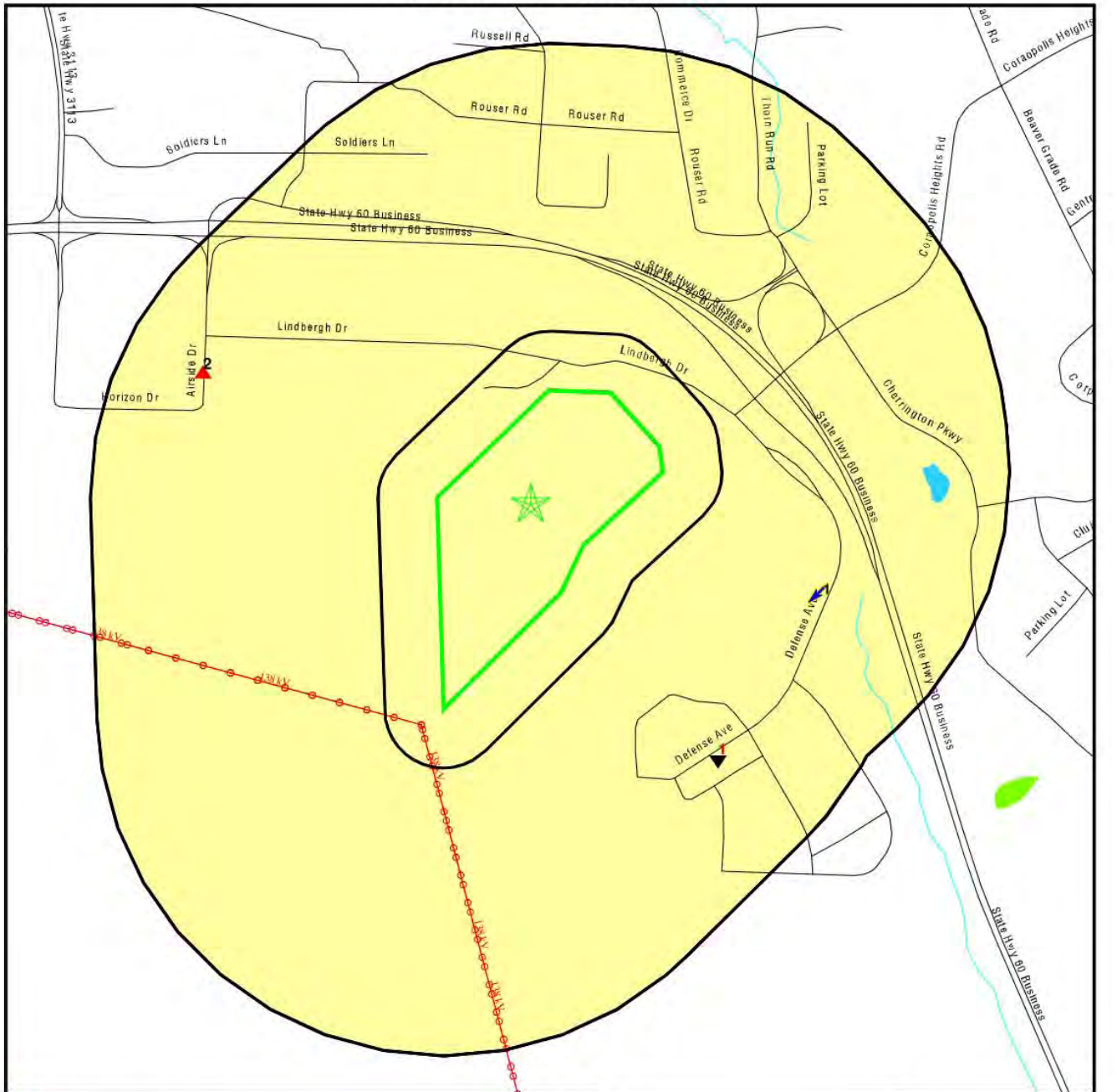
PGH INTL AIRPORT AIR RESERVE STA
1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108

1000406862

NUBRITE CHEMICAL CO
250 AIRSIDE DR, CORAOPOLIS, PA,

S109841507

PRIMARY MAP - 3206711.8s



<p>SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP</p> <p>ADDRESS: 380-399 DEFENSE AVE Coraopolis PA 15108</p> <p>LAT/LONG: 40.4962 / 80.2134</p>	<p>CLIENT: Camp, Dresser & McKee, Inc.</p> <p>CONTACT: Dan Depra</p> <p>INQUIRY #: 3206711.8s</p> <p>DATE: November 16, 2011 6:44 pm</p>
--	--

AERIAL PHOTOGRAPHY - 3206711.8s



SITE NAME: Pittsburgh IAP ARS - 911th Airlift Wing - T-RAMP
ADDRESS: 380-399 DEFENSE AVE
Coraopolis PA 15108
LAT/LONG: 40.4962 / 80.2134

CLIENT: Camp, Dresser & McKee, Inc.
CONTACT: Dan Depra
INQUIRY #: 3206711.8s
DATE: November 16, 2011 6:46 pm

Copyright © 2011 EDR, Inc. © 2010 Tele Atlas Rel. 07/2009.

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108			1000406862
Map ID: ➡	Distance: SE 1/10 - 1/3 (1164 ft. / 0.22 mi.)	Elevation: 21 ft. Lower Elevation 1128 ft. Above Sea Level	Federal RCRA generators list State and tribal leaking storage tank lists State and tribal registered storage tank lists Other Standard Environmental Records

Worksheet:

Groundwater Flow Gradient:
 Upgradient or Indeterminate: YES
 Hydrogeologically: YES
 Topographically: YES
 AQUIFLOW: YES
 Experience: YES

Database Details:

FINDS: Other Standard Environmental Records

Registry ID: 110001222622

Environmental Interest/Information System:

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

PA-EFACTS (Pennsylvania - Environmental Facility Application Compliance Tracking System) is a Department-wide database that provides a holistic view of clients and sites (including facilities) that DEP regulates.

PCS (Permit Compliance System) is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

RCRA-SQG: Federal RCRA generators list

Date form received by agency:	04/22/2010
Facility name:	911TH AIRLIFT WING
Facility address:	PITTSBURGH INTL ARPRT ARS 2475 DEFENSE AVE STE 101 CORAOPOLIS, PA 151084403
EPA ID:	PA2570024289
Mailing address:	1100 HERMAN AVE CORAOPOLIS, PA 151084421
Contact:	JOSEPH MATIS
Contact address:	1100 HERMAN AVE CORAOPOLIS, PA 151084421
Contact country:	US
Contact telephone:	(412) 474-8749
Contact email:	JOSEPH.MATIS@PITTSBURGH.AR.MIL
EPA Region:	03
Land type:	Federal
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time
Owner/Operator Summary:	
Owner/operator name:	DEPT OF THE AIR FORCE
Owner/operator address:	Not Reported
Owner/operator country:	Not Reported
Owner/operator telephone:	Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Legal status:	Federal
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1970
Owner/Op end date:	Not Reported
Owner/operator name:	DEPT OF THE AIR FORCE
Owner/operator address:	1100 HERMAN AVE CORAOPOLIS, PA 15108
Owner/operator country:	US
Owner/operator telephone:	Not Reported
Legal status:	Federal
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1970
Owner/Op end date:	Not Reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	03/22/2001
Facility name:	911TH AIRLIFT WING
Classification:	Large Quantity Generator

Date form received by agency:	12/11/2000
Facility name:	911TH AIRLIFT WING
Classification:	Small Quantity Generator

Hazardous Waste Summary:

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Waste code:	D003
Waste name:	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Waste code:	D004
Waste name:	ARSENIC
Waste code:	D005
Waste name:	BARIUM
Waste code:	D006
Waste name:	CADMIUM
Waste code:	D007
Waste name:	CHROMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Waste code:	D010
Waste name:	SELENIUM

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Waste code: D011
Waste name: SILVER

Waste code: D018
Waste name: BENZENE

Waste code: D019
Waste name: CARBON TETRACHLORIDE

Waste code: D022
Waste name: CHLOROFORM

Waste code: D028
Waste name: 1,2-DICHLOROETHANE

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: D039
Waste name: TETRACHLOROETHYLENE

Waste code: D040
Waste name: TRICHLOROETHYLENE

Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: U002

Waste name: ACETONE (I)

Waste code: U050

Waste name: CHRYSENE

Waste code: U051

Waste name: CREOSOTE

Waste code: U080

Waste name: METHANE, DICHLORO-

Waste code: U117

Waste name: ETHANE, 1,1'-OXYBIS-(I)

Waste code: U129

Waste name: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA,2ALPHA,3BETA,4ALPHA,5ALPHA,6BETA)-

Waste code: U151

Waste name: MERCURY

Waste code: U154

Waste name: METHANOL (I)

Waste code: U226

Waste name: ETHANE, 1,1,1-TRICHLORO-

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Facility Has Received Notices of Violations:

Regulation violated:	Not Reported
Area of violation:	Universal Waste - Small Quantity Handlers
Date violation determined:	04/30/2009
Date achieved compliance:	04/30/2009
Violation lead agency:	EPA
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	09/14/2009
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	EPA
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	SR - 262.42
Area of violation:	Generators - Manifest
Date violation determined:	01/21/1992
Date achieved compliance:	10/20/1992
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	02/10/1992
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	FR - 265.176
Area of violation:	Generators - General
Date violation determined:	01/21/1992
Date achieved compliance:	10/20/1992
Violation lead agency:	EPA
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	SR - 262.41
----------------------	-------------

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: State
 Enforcement action: WRITTEN INFORMAL
 Enforcement action date: 02/10/1992
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: State
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - 265.16(f)(1)
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - SQG TO GEN
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - 400 CFR 265.174
 Area of violation: Generators - Records/Reporting
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	FR - 40 CFR 256.16(a)(b)(c)
Area of violation:	Generators - General
Date violation determined:	01/21/1992
Date achieved compliance:	10/20/1992
Violation lead agency:	EPA
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	FR - 265.174
Area of violation:	Generators - General
Date violation determined:	01/21/1992
Date achieved compliance:	10/20/1992
Violation lead agency:	EPA
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	FR - 262.34(a)(2)(4)
Area of violation:	Generators - General
Date violation determined:	01/21/1992
Date achieved compliance:	10/20/1992
Violation lead agency:	EPA
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - 262.42(b)
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: SR - 262.34(a)(1)
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: State
 Enforcement action: WRITTEN INFORMAL
 Enforcement action date: 02/10/1992
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: State
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: SR - 262.34(a)(5) & 265.16
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: State
 Enforcement action: WRITTEN INFORMAL
 Enforcement action date: 02/10/1992
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: State
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Regulation violated: FR - 262.41(a)(6)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not Reported
Enforcement action date: Not Reported
Enf. disposition status: Not Reported
Enf. disp. status date: Not Reported
Enforcement lead agency: Not Reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 265.16(f)(2)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not Reported
Enforcement action date: Not Reported
Enf. disposition status: Not Reported
Enf. disp. status date: Not Reported
Enforcement lead agency: Not Reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 265.52(b)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not Reported
Enforcement action date: Not Reported
Enf. disposition status: Not Reported
Enf. disp. status date: Not Reported
Enforcement lead agency: Not Reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 262.41(a)(7)
Area of violation: Generators - General
Date violation determined: 01/21/1992

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - 262.34(a)(4)
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: SR - 261.41(b)(7)
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: State
 Enforcement action: WRITTEN INFORMAL
 Enforcement action date: 02/10/1992
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: State
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: Not Reported
 Area of violation: Generators - General
 Date violation determined: 02/01/1990
 Date achieved compliance: 03/09/1990
 Violation lead agency: State
 Enforcement action: WRITTEN INFORMAL
 Enforcement action date: 02/13/1990

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Enf. disposition status: Not Reported
Enf. disp. status date: Not Reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not Reported
Area of violation: Generators - General
Date violation determined: 02/01/1990
Date achieved compliance: 10/20/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/13/1990
Enf. disposition status: Not Reported
Enf. disp. status date: Not Reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Evaluation Action Summary:

Evaluation date: 04/30/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Universal Waste - Small Quantity Handlers
Date achieved compliance: 04/30/2009
Evaluation lead agency: EPA

Evaluation date: 10/20/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 01/21/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 10/20/1992
Evaluation lead agency: State

Evaluation date: 01/21/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 10/20/1992

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Evaluation lead agency: State

Evaluation date: 01/21/1992

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 10/20/1992

Evaluation lead agency: EPA

Evaluation date: 01/21/1992

Evaluation: CASE DEVELOPMENT INSPECTION

Area of violation: Generators - General

Date achieved compliance: 10/20/1992

Evaluation lead agency: EPA

Evaluation date: 01/21/1992

Evaluation: CASE DEVELOPMENT INSPECTION

Area of violation: Generators - Records/Reporting

Date achieved compliance: 10/20/1992

Evaluation lead agency: EPA

Evaluation date: 02/01/1990

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 03/09/1990

Evaluation lead agency: State

Evaluation date: 02/01/1990

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 10/20/1992

Evaluation lead agency: State

PA MANIFEST: Other Standard Environmental Records

Manifest Number: PAH237145

Manifest Type: D

Generator EPA Id: PA2570024289

Generator Date: 04/27/06

Mailing Address: Not Reported

Mailing City,St,Zip: Not Reported

Contact Name: Not Reported

Contact Phone: Not Reported

TSD Epa Id: KYD053348108

TSD Date: Not Reported

TSD Facility Name: SAFETY KLEEN CORP

TSD Facility Address: 3700 LAGRANGE RD

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

TSD Facility City:	SMITHFIELD
TSD Facility State:	KY
Facility Telephone:	412-474-8749
Page Number:	1
Line Number:	1
Waste Number:	D018
Container Number:	6
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	1310
Unit:	Pounds
Handling Code:	Not Reported
TSP EPA Id:	Not Reported
Date TSP Sig:	Not Reported
Manifest Number:	PAH294850
Manifest Type:	T
Generator EPA Id:	PA2570024289
Generator Date:	06/09/06
Mailing Address:	Not Reported
Mailing City,St,Zip:	Not Reported
Contact Name:	Not Reported
Contact Phone:	Not Reported
TSD Epa Id:	WVD981107600
TSD Date:	Not Reported
TSD Facility Name:	AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address:	1750 MORGANTOWN IND PK
TSD Facility City:	MORGANTOWN
TSD Facility State:	WV
Facility Telephone:	412-474-8749
Page Number:	1
Line Number:	1
Waste Number:	D001
Container Number:	1
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	446
Unit:	Pounds
Handling Code:	Not Reported
TSP EPA Id:	Not Reported
Date TSP Sig:	Not Reported
Manifest Number:	PAH294850
Manifest Type:	T
Generator EPA Id:	PA2570024289
Generator Date:	06/09/06
Mailing Address:	Not Reported
Mailing City,St,Zip:	Not Reported
Contact Name:	Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D001
Container Number: 2
Container Type: Metal drums, barrels, kegs
Waste Quantity: 142
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D001
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 18
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294850
Manifest Type: T

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D008
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 18
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D035
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 18
Unit: Pounds
Handling Code: Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 4
Waste Number: D035
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 23
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 4
Waste Number: F005

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 23
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D001
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 181
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

TSD Facility State:	WV
Facility Telephone:	412-474-8749
Page Number:	1
Line Number:	1
Waste Number:	D007
Container Number:	1
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	181
Unit:	Pounds
Handling Code:	Not Reported
TSP EPA Id:	Not Reported
Date TSP Sig:	Not Reported
Manifest Number:	PAH294854
Manifest Type:	T
Generator EPA Id:	PA2570024289
Generator Date:	06/09/06
Mailing Address:	Not Reported
Mailing City,St,Zip:	Not Reported
Contact Name:	Not Reported
Contact Phone:	Not Reported
TSD Epa Id:	WVD981107600
TSD Date:	Not Reported
TSD Facility Name:	AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address:	1750 MORGANTOWN IND PK
TSD Facility City:	MORGANTOWN
TSD Facility State:	WV
Facility Telephone:	412-474-8749
Page Number:	1
Line Number:	1
Waste Number:	D018
Container Number:	1
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	181
Unit:	Pounds
Handling Code:	Not Reported
TSP EPA Id:	Not Reported
Date TSP Sig:	Not Reported
Manifest Number:	PAH294854
Manifest Type:	T
Generator EPA Id:	PA2570024289
Generator Date:	06/09/06
Mailing Address:	Not Reported
Mailing City,St,Zip:	Not Reported
Contact Name:	Not Reported
Contact Phone:	Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D039
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 181
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D001
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 6
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D007
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 6
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D035
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 6
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D035
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 2
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH295009
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 03/10/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D001
Container Number: 2

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Container Type: Metal drums, barrels, kegs
Waste Quantity: 60
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH295009
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 03/10/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D001
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 78
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH295009
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 03/10/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Facility Telephone:	412-474-8749
Page Number:	1
Line Number:	3
Waste Number:	NONE
Container Number:	1
Container Type:	Burlap, cloth, paper or plastic bags
Waste Quantity:	420
Unit:	Pounds
Handling Code:	Not Reported
TSP EPA Id:	Not Reported
Date TSP Sig:	Not Reported
Manifest Number:	PAH295009
Manifest Type:	T
Generator EPA Id:	PA2570024289
Generator Date:	03/10/06
Mailing Address:	Not Reported
Mailing City,St,Zip:	Not Reported
Contact Name:	Not Reported
Contact Phone:	Not Reported
TSD Epa Id:	WVD981107600
TSD Date:	Not Reported
TSD Facility Name:	AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address:	1750 MORGANTOWN IND PK
TSD Facility City:	MORGANTOWN
TSD Facility State:	WV
Facility Telephone:	412-474-8749
Page Number:	1
Line Number:	4
Waste Number:	NONE
Container Number:	1
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	234
Unit:	Pounds
Handling Code:	Not Reported
TSP EPA Id:	Not Reported
Date TSP Sig:	Not Reported

The PA MANIFEST database contains 54 additional records for this site. Please contact your EDR Account Executive for more information.

LUST: State and tribal leaking storage tank lists

Region:	LUST
Facility Id:	02-81147
Facility Address2:	2475 DEFENSE AVE
Facility Type:	Underground Storage Tank Containing Petroleum
Facility Status:	Cleanup Completed

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Status Date: 04/30/2002
Release Date: 09/08/1994
Source Cause Desc: Not Reported

Region: 4500
Facility Id: 02-81147
Facility Address2: 2475 DEFENSE AVE
Facility Type: Underground Storage Tank Containing Petroleum
Facility Status: Cleanup Completed
Status Date: 04/30/2002
Release Date: 04/01/1998
Source Cause Desc: Not Reported

FINDS: Other Standard Environmental Records

Registry ID: 110001222622

Environmental Interest/Information System:

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

PA-EFACTS (Pennsylvania - Environmental Facility Application Compliance Tracking System) is a Department-wide database that provides a holistic view of clients and sites (including facilities) that DEP regulates.

PCS (Permit Compliance System) is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

RCRA-SQG: Federal RCRA generators list

Date form received by agency:	04/22/2010
Facility name:	911TH AIRLIFT WING
Facility address:	PITTSBURGH INTL ARPRT ARS 2475 DEFENSE AVE STE 101 CORAOPOLIS, PA 151084403
EPA ID:	PA2570024289
Mailing address:	1100 HERMAN AVE CORAOPOLIS, PA 151084421
Contact:	JOSEPH MATIS
Contact address:	1100 HERMAN AVE CORAOPOLIS, PA 151084421
Contact country:	US
Contact telephone:	(412) 474-8749
Contact email:	JOSEPH.MATIS@PITTSBURGH.AR.MIL
EPA Region:	03
Land type:	Federal
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time
Owner/Operator Summary:	
Owner/operator name:	DEPT OF THE AIR FORCE
Owner/operator address:	Not Reported
Owner/operator country:	Not Reported
Owner/operator telephone:	Not Reported
Legal status:	Federal
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1970
Owner/Op end date:	Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Owner/operator name: DEPT OF THE AIR FORCE
Owner/operator address: 1100 HERMAN AVE
CORAPOLIS, PA 15108
Owner/operator country: US
Owner/operator telephone: Not Reported
Legal status: Federal
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1970
Owner/Op end date: Not Reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 03/22/2001
Facility name: 911TH AIRLIFT WING
Classification: Large Quantity Generator

Date form received by agency: 12/11/2000
Facility name: 911TH AIRLIFT WING
Classification: Small Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002

Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003

Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D004

Waste name: ARSENIC

Waste code: D005

Waste name: BARIUM

Waste code: D006

Waste name: CADMIUM

Waste code: D007

Waste name: CHROMIUM

Waste code: D008

Waste name: LEAD

Waste code: D009

Waste name: MERCURY

Waste code: D010

Waste name: SELENIUM

Waste code: D011

Waste name: SILVER

Waste code: D018

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Waste name:	BENZENE
Waste code:	D019
Waste name:	CARBON TETRACHLORIDE
Waste code:	D022
Waste name:	CHLOROFORM
Waste code:	D028
Waste name:	1,2-DICHLOROETHANE
Waste code:	D035
Waste name:	METHYL ETHYL KETONE
Waste code:	D039
Waste name:	TETRACHLOROETHYLENE
Waste code:	D040
Waste name:	TRICHLOROETHYLENE
Waste code:	F001
Waste name:	<p>THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.</p>
Waste code:	F002
Waste name:	<p>THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.</p>
Waste code:	F003
Waste name:	<p>THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF</p>

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: U002

Waste name: ACETONE (I)

Waste code: U050

Waste name: CHRYSENE

Waste code: U051

Waste name: CREOSOTE

Waste code: U080

Waste name: METHANE, DICHLORO-

Waste code: U117

Waste name: ETHANE, 1,1'-OXYBIS-(I)

Waste code: U129

Waste name: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA,2ALPHA,3BETA,4ALPHA,5ALPHA,6BETA)-

Waste code: U151

Waste name: MERCURY

Waste code: U154

Waste name: METHANOL (I)

Waste code: U226

Waste name: ETHANE, 1,1,1-TRICHLORO-

Facility Has Received Notices of Violations:

Regulation violated: Not Reported

Area of violation: Universal Waste - Small Quantity Handlers

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Date violation determined: 04/30/2009
 Date achieved compliance: 04/30/2009
 Violation lead agency: EPA
 Enforcement action: WRITTEN INFORMAL
 Enforcement action date: 09/14/2009
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: EPA
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: SR - 262.42
 Area of violation: Generators - Manifest
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: State
 Enforcement action: WRITTEN INFORMAL
 Enforcement action date: 02/10/1992
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: State
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - 265.176
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: SR - 262.41
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: State
 Enforcement action: WRITTEN INFORMAL

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Enforcement action date: 02/10/1992
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: State
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - 265.16(f)(1)
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - SQG TO GEN
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - 400 CFR 265.174
 Area of violation: Generators - Records/Reporting
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - 40 CFR 256.16(a)(b)(c)
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - 265.174
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Regulation violated: FR - 262.34(a)(2)(4)
 Area of violation: Generators - General
 Date violation determined: 01/21/1992
 Date achieved compliance: 10/20/1992
 Violation lead agency: EPA
 Enforcement action: Not Reported
 Enforcement action date: Not Reported
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: Not Reported
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Regulation violated: FR - 262.42(b)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: EPA
Enforcement action: Not Reported
Enforcement action date: Not Reported
Enf. disposition status: Not Reported
Enf. disp. status date: Not Reported
Enforcement lead agency: Not Reported
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 262.34(a)(1)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/10/1992
Enf. disposition status: Not Reported
Enf. disp. status date: Not Reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 262.34(a)(5) & 265.16
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/10/1992
Enf. disposition status: Not Reported
Enf. disp. status date: Not Reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: FR - 262.41(a)(6)
Area of violation: Generators - General
Date violation determined: 01/21/1992
Date achieved compliance: 10/20/1992

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Violation lead agency:	EPA
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0
Regulation violated:	FR - 265.16(f)(2)
Area of violation:	Generators - General
Date violation determined:	01/21/1992
Date achieved compliance:	10/20/1992
Violation lead agency:	EPA
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0
Regulation violated:	FR - 265.52(b)
Area of violation:	Generators - General
Date violation determined:	01/21/1992
Date achieved compliance:	10/20/1992
Violation lead agency:	EPA
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0
Regulation violated:	FR - 262.41(a)(7)
Area of violation:	Generators - General
Date violation determined:	01/21/1992
Date achieved compliance:	10/20/1992
Violation lead agency:	EPA
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	FR - 262.34(a)(4)
Area of violation:	Generators - General
Date violation determined:	01/21/1992
Date achieved compliance:	10/20/1992
Violation lead agency:	EPA
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	SR - 261.41(b)(7)
Area of violation:	Generators - General
Date violation determined:	01/21/1992
Date achieved compliance:	10/20/1992
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	02/10/1992
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	Not Reported
Area of violation:	Generators - General
Date violation determined:	02/01/1990
Date achieved compliance:	03/09/1990
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	02/13/1990
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	0
Final penalty amount:	0

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Paid penalty amount: 0

Regulation violated: Not Reported
 Area of violation: Generators - General
 Date violation determined: 02/01/1990
 Date achieved compliance: 10/20/1992
 Violation lead agency: State
 Enforcement action: WRITTEN INFORMAL
 Enforcement action date: 02/13/1990
 Enf. disposition status: Not Reported
 Enf. disp. status date: Not Reported
 Enforcement lead agency: State
 Proposed penalty amount: 0
 Final penalty amount: 0
 Paid penalty amount: 0

Evaluation Action Summary:

Evaluation date: 04/30/2009
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
 Area of violation: Universal Waste - Small Quantity Handlers
 Date achieved compliance: 04/30/2009
 Evaluation lead agency: EPA

Evaluation date: 10/20/1992
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
 Area of violation: Not Reported
 Date achieved compliance: Not Reported
 Evaluation lead agency: State

Evaluation date: 01/21/1992
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
 Area of violation: Generators - General
 Date achieved compliance: 10/20/1992
 Evaluation lead agency: State

Evaluation date: 01/21/1992
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
 Area of violation: Generators - Manifest
 Date achieved compliance: 10/20/1992
 Evaluation lead agency: State

Evaluation date: 01/21/1992
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
 Area of violation: Generators - General

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Date achieved compliance: 10/20/1992

Evaluation lead agency: EPA

Evaluation date: 01/21/1992

Evaluation: CASE DEVELOPMENT INSPECTION

Area of violation: Generators - General

Date achieved compliance: 10/20/1992

Evaluation lead agency: EPA

Evaluation date: 01/21/1992

Evaluation: CASE DEVELOPMENT INSPECTION

Area of violation: Generators - Records/Reporting

Date achieved compliance: 10/20/1992

Evaluation lead agency: EPA

Evaluation date: 02/01/1990

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 03/09/1990

Evaluation lead agency: State

Evaluation date: 02/01/1990

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 10/20/1992

Evaluation lead agency: State

NY MANIFEST: Other Standard Environmental Records

EPA ID: PA2570024289

Country: USA

Mailing Name: UNITED STATES MILITARY

Mailing Contact: UNITED STATES MILITARY

Mailing Address: 911TH TAC-GREATER PITTSBURGH

Mailing Address 2: Not Reported

Mailing City: AIRPORT-PITTSBURGH

Mailing State: PA

Mailing Zip: 15231

Mailing Zip4: Not Reported

Mailing Country: USA

Mailing Phone: 717-267-9357

Document ID: NYG1228518

Manifest Status: Not Reported

Trans1 State ID: NJD054126164

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Trans2 State ID:	Not Reported
Generator Ship Date:	12/10/1998
Trans1 Recv Date:	12/10/1998
Trans2 Recv Date:	Not Reported
TSD Site Recv Date:	12/11/1998
Part A Recv Date:	Not Reported
Part B Recv Date:	Not Reported
Generator EPA ID:	PA2570024289
Trans1 EPA ID:	NYD049836679
Trans2 EPA ID:	Not Reported
TSDF ID:	T3K761
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	00213
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	00560
Units:	P - Pounds
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	D007 - CHROMIUM 5.0 MG/L TCLP
Quantity:	00053
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Year:	98

Document ID:	NYA8099613
Manifest Status:	Completed copy
Trans1 State ID:	000000000
Trans2 State ID:	000000000
Generator Ship Date:	890511
Trans1 Recv Date:	890511
Trans2 Recv Date:	Not Reported
TSD Site Recv Date:	890530
Part A Recv Date:	890519
Part B Recv Date:	890601
Generator EPA ID:	PA2570024289
Trans1 EPA ID:	TND987766292

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Trans2 EPA ID:	GAD981233000
TSDF ID:	NYD000632372
Waste Code:	D003 - NON-LISTED REACTIVE WASTES
Quantity:	00001
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Year:	89

NJ MANIFEST: Other Standard Environmental Records

Manifest Code:	001988587SKS
EPA ID:	PA2570024289
Date Shipped:	10/02/09
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	NJD071629976
Transporter 3 EPA ID:	Not Reported
Transporter 4 EPA ID:	Not Reported
Transporter 5 EPA ID:	Not Reported
Transporter 6 EPA ID:	Not Reported
Transporter 7 EPA ID:	Not Reported
Transporter 8 EPA ID:	Not Reported
Transporter 10 EPA ID:	Not Reported
Date Trans1 Transported Waste:	10/02/09
Date Trans2 Transported Waste:	10/13/09
Date Trans3 Transported Waste:	Not Reported
Date Trans4 Transported Waste:	Not Reported
Date Trans5 Transported Waste:	Not Reported
Date Trans6 Transported Waste:	Not Reported
Date Trans7 Transported Waste:	Not Reported
Date Trans8 Transported Waste:	Not Reported
Date Trans9 Transported Waste:	Not Reported
Date Trans10 Transported Waste:	Not Reported
Date TSDF Received Waste:	10/13/09
Transporter 1 Decal:	Not Reported
Transporter 2 Decal:	Not Reported
Data Entry Number:	Not Reported
Reference Manifest Number:	Not Reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not Reported
Waste Code:	D001
Manifest Year:	2009 New Jersey Manifest Data
Quantity:	269
Unit:	P

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Hand Code: H061

PA MANIFEST: Other Standard Environmental Records

Manifest Number:	PAH237145
Manifest Type:	D
Generator EPA Id:	PA2570024289
Generator Date:	04/27/06
Mailing Address:	Not Reported
Mailing City,St,Zip:	Not Reported
Contact Name:	Not Reported
Contact Phone:	Not Reported
TSD Epa Id:	KYD053348108
TSD Date:	Not Reported
TSD Facility Name:	SAFETY KLEEN CORP
TSD Facility Address:	3700 LAGRANGE RD
TSD Facility City:	SMITHFIELD
TSD Facility State:	KY
Facility Telephone:	412-474-8749
Page Number:	1
Line Number:	1
Waste Number:	D018
Container Number:	6
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	1310
Unit:	Pounds
Handling Code:	Not Reported
TSP EPA Id:	Not Reported
Date TSP Sig:	Not Reported
Manifest Number:	PAH294850
Manifest Type:	T
Generator EPA Id:	PA2570024289
Generator Date:	06/09/06
Mailing Address:	Not Reported
Mailing City,St,Zip:	Not Reported
Contact Name:	Not Reported
Contact Phone:	Not Reported
TSD Epa Id:	WVD981107600
TSD Date:	Not Reported
TSD Facility Name:	AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address:	1750 MORGANTOWN IND PK
TSD Facility City:	MORGANTOWN
TSD Facility State:	WV

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D001
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 446
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D001
Container Number: 2
Container Type: Metal drums, barrels, kegs
Waste Quantity: 142
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D001
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 18
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D008
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 18
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D035
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 18
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 4
Waste Number: D035
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 23
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Manifest Number: PAH294850
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 4
Waste Number: F005
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 23
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D001
Container Number: 1
Container Type: Metal drums, barrels, kegs

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Waste Quantity: 181
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D007
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 181
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Page Number: 1
Line Number: 1
Waste Number: D018
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 181
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749

Page Number: 1
Line Number: 1
Waste Number: D039
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 181
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D001
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 6
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD EPA Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D007
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 6
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D035
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 6
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH294854
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 06/09/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: D035
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 2
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Manifest Number: PAH295009
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 03/10/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 1
Waste Number: D001
Container Number: 2
Container Type: Metal drums, barrels, kegs
Waste Quantity: 60
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH295009
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 03/10/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 2
Waste Number: D001
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 78

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH295009
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 03/10/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1
Line Number: 3
Waste Number: NONE
Container Number: 1
Container Type: Burlap, cloth, paper or plastic bags
Waste Quantity: 420
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

Manifest Number: PAH295009
Manifest Type: T
Generator EPA Id: PA2570024289
Generator Date: 03/10/06
Mailing Address: Not Reported
Mailing City,St,Zip: Not Reported
Contact Name: Not Reported
Contact Phone: Not Reported
TSD Epa Id: WVD981107600
TSD Date: Not Reported
TSD Facility Name: AMERICAN ENVIRONMENTAL SERVICES INC
TSD Facility Address: 1750 MORGANTOWN IND PK
TSD Facility City: MORGANTOWN
TSD Facility State: WV
Facility Telephone: 412-474-8749
Page Number: 1

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Line Number: 4
Waste Number: NONE
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 234
Unit: Pounds
Handling Code: Not Reported
TSP EPA Id: Not Reported
Date TSP Sig: Not Reported

The PA MANIFEST database contains 54 additional records for this site. Please contact your EDR Account Executive for more information.

LUST: State and tribal leaking storage tank lists

Region: LUST
Facility Id: 02-81147
Facility Address2: 2475 DEFENSE AVE
Facility Type: Underground Storage Tank Containing Petroleum
Facility Status: Cleanup Completed
Status Date: 04/30/2002
Release Date: 09/08/1994
Source Cause Desc: Not Reported

Region: 4500
Facility Id: 02-81147
Facility Address2: 2475 DEFENSE AVE
Facility Type: Underground Storage Tank Containing Petroleum
Facility Status: Cleanup Completed
Status Date: 04/30/2002
Release Date: 04/01/1998
Source Cause Desc: Not Reported

AST: State and tribal registered storage tank lists


Mailing Name: 911 AIRLIFT WING USAF
Mailing Address: PITTSBURGH AIR RESERVE STATION
Mailing Address: 2475 DEFENSE AVE
Mailing City,St,Zip: CORAOPOLIS, PA 15108-4403
Municipality: Moon
Client Id: 166443
Site ID: 562565
Other Id: 02-81147
2nd Facility Addr: 2475 DEFENSE AVE
Region Code: 4500
Region Code Name: EP Sw Rgnl Off Pittsburgh
Tank Code: AST

MAP FINDINGS

PGH INTL AIRPORT AIR RESERVE STA, 1100 HERMAN AVENUE, CORAOPOLIS, PA, 15108 (Continued)

Tank Seq Num:	009A
Tank Capacity:	2500
Date Installed:	Not Reported
Substance:	Aviation Gasoline
Tank Status:	Currently In Use
Inspection Code:	Not Reported
Tank Last Inspected:	Not Reported
Registration Expiration Date:	10/04/2011

MAP FINDINGS

NUBRITE CHEMICAL CO 250 AIRSIDE DR, CORAOPOLIS, PA,			S109841507
Map ID: 	Distance: WNW 1/10 - 1/3 (1344 ft. / 0.254 mi.)	Elevation: 10 ft. Higher Elevation 1159 ft. Above Sea Level	Other Standard Environmental Records

Worksheet:

Database Details:

ACT 2-DEED: Other Standard Environmental Records

Region: 4500
Municipality: Haysville
Site Size: Not Reported
Cleanup Standard: Site Specific
Cleanup Indicator: INSTC
Response Date: 11/30/2006
Category Description: Chlorinated Solvents, Lead
Land Designation Code: Not Reported

Region: 4500
Municipality: Haysville
Site Size: Not Reported
Cleanup Standard: Site Specific
Cleanup Indicator: INSTC
Response Date: 11/30/2006
Category Description: Chlorinated Solvents, Lead
Land Designation Code: Not Reported

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

**Appendix G: Site Inspection Documents
Appendix G-2: Interview Reports**

THIS SECTION INTENTIONALLY LEFT BLANK
[REFER TO APPENDIX A FOR REFERENCES REVIEWED]

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix G: Site Inspection Documents
Appendix G-3: Visual Site Inspection Forms

THIS SECTION INTENTIONALLY LEFT BLANK

[REFER TO APPENDIX I]

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix G: Site Inspection Documents
Appendix G-4: Hazardous Materials Inventory

THIS SECTION INTENTIONALLY LEFT BLANK

[NO HAZARDOUS MATERIALS PRESENT]

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix H: Certifications

Certification of the Environmental Baseline Survey

Certification of Polychlorinated Biphenyls Clearance

Certification of Contamination or Non-Contamination

Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW)
Pittsburgh International Airport Air Reserve Station
Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority

Certification of No Contamination

This real property contains no known hazardous substances as that term is defined in the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601), as amended, or other contamination as specified by the Resource Conservation and Recovery Act of 1976, the implementing Environmental Protection Agency regulations (40 CFR Parts 261, 262, 263, and 761), and the Federal Property Management Regulations (41 CFR Part 101-47). A complete search of agency files and investigation findings revealed that no hazardous substance has been stored for more than one year, known to have been released, or disposed of on the "T-Ramp" parcel.

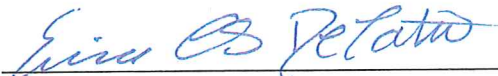
Regarding hazardous substances "known to have been released": The "EBS Phase II Investigation" (see Appendix I) conducted during this EA/EBS indicates that subsurface petroleum constituent concentrations at the T-Ramp did not exceed the non-residential PADEP Statewide Health Standards for soil or the non-residential, non-use aquifer PADEP Statewide Health Standards for groundwater. This confirms that all remedial actions necessary to protect human health and the environment have been taken due to the historic release and migration of hazardous substances or petroleum products that occurred (i.e., Jet A fuel) at the adjacent PIT Old Terminal Fuel Distribution System area. No other sources of contamination were identified during the EBS Phase II that impacted the T-Ramp area.

Certified by:



Daniel J. DePra, P.E., BCEE
Project Manager, CDM Smith Inc.


Date: 9/9/2012



Erica L.S. DeLattre, P.E.
Technical Project Manager
Rhēa Engineers & Consultants, Inc.

Date: 9/9/12

Approved by:



Mr. Joseph B. Matis
Environmental Flight Chief
911th Airlift Wing/MSG/CEV, Pittsburgh International Airport Air Reserve Station

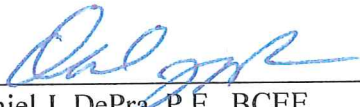
Date: 12SEP12

Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW)
Pittsburgh International Airport Air Reserve Station
Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority

Certification of Polychlorinated Biphenyls Clearance

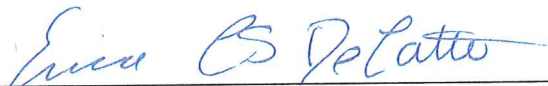
A records search and on-site inspection indicate that the "T-Ramp" property has not been exposed to PCB materials or equipment.

Certified by:



Daniel J. DePra, P.E., BCEE
Project Manager, CDM Smith Inc.


Date: 9/9/2012



Erica L.S. DeLattre, P.E.
Technical Project Manager
Rhēa Engineers & Consultants, Inc.

Date: 9/9/12

Approved by:



Mr. Joseph B. Matis
Environmental Flight Chief
911th Airlift Wing/MSG/CEV, Pittsburgh International Airport Air Reserve Station

Date: 12SEP12

Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW)
Pittsburgh International Airport Air Reserve Station
Environmental Assessment and Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority

Certification of the Environmental Baseline Survey

CDM Smith Inc. and Rhēa Engineers & Consultants, Inc. have conducted this Environmental Baseline Survey (EBS) on behalf of the AFRC and 911 AW. The purpose of the EBS Phase II was to evaluate the recognized environmental conditions (RECs) identified in the *Environmental Baseline Survey Report, Additional Acreage from Allegheny County* (CDM, 1996). Specifically, the objective of this Phase II EBS was to determine if the subsurface soil and groundwater beneath the T-Ramp was impacted by the historic release of Jet A fuel from the former Greater Pittsburgh International Airport Old Terminal Fuel Distribution System, which was located to the immediate west of the T-Ramp.

Based on a review of related documents, a Sampling and Analysis Plan was developed to identify the most likely hazardous substance or petroleum products that may be present at the T-Ramp. This plan consisted of collecting subsurface soil samples with subsequent laboratory analysis for TCL-VOCs and total lead, and groundwater sampling and analysis for TCL-VOCs, dissolved lead, and EDB. Laboratory analytical results were then reviewed by the CDM Smith team and found to be below PA Act 2 Non-Residential Statewide Health Standards for soil and Non-use Aquifer, Non-Residential Statewide Health Standards for groundwater.

Based on previous documentation, hazardous substances or petroleum products may have previously been released or disposed at or adjacent to the T-Ramp. However, with respect to the RECs assessed, there is no evidence that a release at, or adjacent to, the T-Ramp has significantly impacted the property soil or groundwater. Additionally, no further environmental investigation at the T-Ramp is recommended.

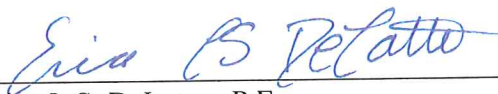
To the best of our knowledge, the information contained within the EBS report is based on sampling and analysis data collected during this investigation and records made available to us. This information is correct and current as of August 9, 2012.

Certified by:



Daniel J. DePra, P.E., BCEE
Project Manager, CDM Smith Inc.

Date: 9/9/2012



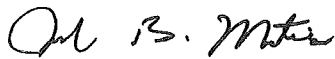
Erica L.S. DeLattre, P.E.
Technical Project Manager
Rhēa Engineers & Consultants, Inc.

Date: 9/9/12

Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW)
Pittsburgh International Airport Air Reserve Station
Environmental Assessment and Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority

Certification of the Environmental Baseline Survey

Approved by:



Date: 12 SEP 12

Mr. Joseph B. Matis
Environmental Flight Chief
911th Airlift Wing/MSG/CEV, Pittsburgh International Airport Air Reserve Station

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix I: EBS Phase II Investigation
(Format in accordance with Section 11 of ASTM E1903-97)

(See following pages)

ENVIRONMENTAL BASELINE SURVEY
PHASE II INVESTIGATION
LEASE ACQUISITION OF T-RAMP PROPERTY FROM
ALLEGHENY COUNTY AIRPORT AUTHORITY

Contract No. FA6712-10-D-0001

July 2012

Rhēa Project No. 546

Prepared for:

United States Air Force
911th Airlift Wing
Pittsburgh IAP Air Reserve Station
2475 Defense Avenue
Coraopolis, Pennsylvania 15108

Prepared by:

Rhēa Engineers & Consultants, Inc.
4975 William Flynn Highway, Suite 14
Gibsonia, Pennsylvania 15044



July 13, 2012
AF Contract No. FA6712-10-D-0001
Rhēa Project No: 546
Via Email

911th Airlift Wing
Pittsburgh IAP
Air Reserve Station
2475 Defense Avenue
Coraopolis, Pennsylvania 15108

Re: Environmental Baseline Survey (EBS) Phase II Investigation
Lease Acquisition of T-Ramp Property from Allegheny County Airport
Authority (ACAA)

Dear Messrs. Frank Sniezek & Joseph Matis:

Rhēa Engineers & Consultants, Inc. (Rhēa) is pleased to submit this report describing the findings of the EBS Phase II Investigation of the T-Ramp Property located at Pittsburgh International Airport (IAP). This assessment was prepared in general accordance with the ASTM International (ASTM) Standard Practices for Environmental Site Assessments: Phase II ESA Process (ASTM Designation: E1903-97, Re-approved 2002).

The purpose of the EBS Phase II was to evaluate the recognized environmental conditions identified in the *Environmental Baseline Survey Report, Additional Acreage from Allegheny County* (CDM, 1996) and/or screening of said property for the purpose of providing sufficient information regarding the nature and extent of contamination to assist in making an informed business decision about the property.

Messrs. Sniezek & Matis

July 13, 2011

Page 2

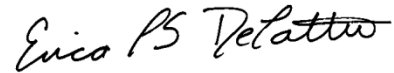
If you have any questions or require further clarification of the report findings, please contact the undersigned at your earliest convenience. Thank you for the opportunity to be of service to the 911th Airlift Wing and support our Armed Forces with mission sustainment.

Sincerely,

Rhēa Engineers & Consultants, Inc.



Marcella G. Johnson P.E.
President/Senior Technical Review



Erica L.S. DeLattre P.E.
Technical Project Manager

MGJ/ED/dwh

EXECUTIVE SUMMARY

Rhēa Engineers & Consultants, Inc. (Rhēa), under contract to Camp Dresser and McKee (CDM) Smith Inc. (CDM Smith), was tasked with conducting an Environmental Baseline Survey (EBS) Phase II Investigation of the T-Ramp Property (T-Ramp) at Pittsburgh International Airport (IAP) Air Reserve Station (ARS). This investigation and report was prepared in general accordance with the ASTM International (ASTM) Standard Guide for Environmental Site Assessments (ESA): Phase II Environmental Site Assessment Process (ASTM Designation: E 1903-97, Re-approved 2002).

The purpose of the EBS Phase II Investigation was to evaluate the recognized environmental conditions (RECs) identified in the *Environmental Baseline Survey Report, Additional Acreage from Allegheny County* (CDM, 1996) (1996 EBS) and/or screen said property for the purpose of providing sufficient information regarding the nature and extent of contamination to facilitate an informed business decision about the property.

The on-site RECs assessed as part of the EBS Phase II Investigation were the areas of the property previously categorized as Category 6 and/or Category 7 in the 1996 EBS (a Category 6 is defined as required response action not implemented – property contains known contamination and required remedial systems or other actions have not been selected or implemented, and a Category 7 is defined as further evaluation required). The assessments performed to evaluate the recognized on-site environmental conditions included the following:

- + Twenty-seven soil borings. Soil samples were collected from each boring, except boring D-7, and submitted for laboratory analysis (a soil sample was not collected from D-7 due to difficult subsurface drilling conditions).
- + Eight of the 27 borings were used as temporary groundwater monitoring or sampling wells with a groundwater sample collected and submitted for laboratory analysis.
- + Laboratory analysis of soils included testing for Target Compound List-Volatile Organic Compounds (TCL-VOCs) via United States Environmental Protection Agency (USEPA) Method 8260B and total lead via USEPA Method 6010B.

- + Water samples were analyzed for TCL-VOCs, dissolved lead, and 1,2-dibromoethane (EDB) via USEPA Methods 8260B, 200.7, and 8011, respectively.

The analytical results from all of the samples taken and selected for comparison were either “non-detect” or below the The Pennsylvania Land Recycling Program Technical Guidance Manual – Act 2 Statewide Health Standards.

There was sufficient data gathered during this investigation to determine whether hazardous substances or petroleum products were released or disposed of at the property.

Based on previous documentation, hazardous substances or petroleum products may have previously been released or disposed of at, or adjacent to, the T-Ramp. However, with respect to the RECs assessed, there is no evidence that a release at, or adjacent to, the T-Ramp has significantly impacted the property soil or groundwater.

Based on the results of this assessment, no further environmental investigation of the T-Ramp is recommended. Due to the presence of several voids encountered during subsurface exploration and sampling, Rhēa recommends that a Geotechnical Engineering Investigation/Report be completed prior to the construction of any permanent structure upon the property.

TABLE OF CONTENTS

	PAGE
EXECUTIVE SUMMARY	i
LIST OF TABLES.....	v
LIST OF FIGURES	v
LIST OF ATTACHMENTS	v
LIST OF ACRONYMS AND ABBREVIATIONS	vi
1.0 INTRODUCTION	1-1
1.1 Purpose	1-1
1.2 Scope of Services	1-1
1.3 Special Terms and Conditions	1-1
1.4 Limitations and Exceptions of Assessments	1-2
1.5 Limiting Conditions and Methodologies Used	1-2
2.0 BACKGROUND	2-1
2.1 Site Description and Features.....	2-1
2.2 Physical Setting	2-1
2.3 Site History and Land Use	2-1
2.4 Adjacent Property Use	2-2
2.4.1 North/Northeast.....	2-2
2.4.2 Northwest	2-2
2.4.3 West and South	2-2
2.4.4 East	2-3
2.5 Summary of Previous Assessments	2-3
3.0 PHASE II ACTIVITIES.....	ERROR! BOOKMARK NOT DEFINED.
3.1 Scope of Assessment	Error! Bookmark not defined.
3.1.1 Supplemental Record Review	3-1
3.1.2 Sampling and Analysis Plan	3-2
3.1.3 Deviations from the Sampling and Analysis Plan	3-3
3.2 Field Explorations and Methods	3-3
3.2.1 Test Pits	3-3
3.2.2 Test Borings	3-3
3.2.3 Monitoring Well Installations	3-4
3.2.4 Other	3-4
3.3 Sampling and Chemical Analyses	3-4
3.3.1 Soil.....	3-4
3.3.2 Groundwater	3-5
3.3.3 Other	3-6

4.0	EVALUATION AND PRESENTATION OF RESULTS	4-1
4.1	Subsurface Conditions	4-1
4.1.1	Geologic Setting	4-1
4.1.2	Hydrogeologic Conditions.....	4-1
4.1.3	Verification of Conceptual Site Model.....	4-1
4.2	Analytical Data	4-2
4.2.1	Soil.....	4-2
4.2.2	Groundwater	4-2
4.2.3	Other	4-3
5.0	DISCUSSION OF FINDINGS AND CONCLUSIONS.....	5-1
5.1	Recognized Environmental Conditions	5-1
5.2	Affected Media.....	5-2
5.3	Evaluation of Media Quality.....	5-2
5.4	Other Concerns.....	5-2
6.0	RECOMMENDATIONS	6-1
7.0	REFERENCES	7-1

LIST OF TABLES

TABLE 1	Summary of Analytical Results Compared to Applicable Act 2 Standards
TABLE 2	Summary of Soil Borings and Temporary Well Data

LIST OF FIGURES

FIGURE 1	Site Location Map
FIGURE 2	Sample Location Map

LIST OF ATTACHMENTS

ATTACHMENT A	Documents Reviewed
ATTACHMENT B	Subsurface Exploration Boring Logs
ATTACHMENT C	Chain of Custodies & Laboratory Analytical Results
ATTACHMENT D	Data Validation Reports

ACRONYMS AND ABBREVIATIONS

1996 EBS	“Environmental Baseline Survey Report, Additional Acreage from Allegheny County, 1996”
911 AW	911 th Airlift Wing
ACAA	Allegheny County Airport Authority
ACDA	Allegheny County Department of Aviation
PA Act 2	The Land Recycling and Environmental Remediation Standards Act of 1995
ARS	Air Reserve Station
ASTM	ASTM International
bgs	below ground surface
CDM	Camp Dresser and McKee
CDM Smith	Camp Dresser and McKee/Smith
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	CERCLA Information System
PA DCNR	Pennsylvania Department of Conservation and Natural Resources
DO	Dissolved Oxygen
DRO	Diesel Range Organics
EBS	Environmental Baseline Survey
EDB	1,2-Dibromoethane
EDR	Environmental Data Resources
ESA	Environmental Site Assessment
GPIA	Greater Pittsburgh International Airport
HSA	Hollow stem auger
HSCA	Hazardous Sites Cleanup Act
IAP	International Airport
LPH	Liquid phase petroleum hydrocarbons
mg/kg	Milligrams per kilogram
MOA	Memorandum of Agreement
MS/MSD	Matrix Spike/Matrix Spike Duplicate

MSC	Medium Specific Concentrations
NTU	nephelometric turbidity units
ORP	Oxidation Reduction Potential
Pace	Pace Analytical Services, Inc.
PADEP	Pennsylvania Department of Environmental Protection
PHC	Petroleum Hydrocarbons
PID	Photoionization Detector
ppm	parts per million
PVC	Polyvinyl Chloride
QA	Quality Assurance
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
Rhēa	Rhēa Engineers & Consultants, Inc.
REC	Recognized Environmental Condition
SPT	Standard Penetration Testing
TCL	Target Compound List
T-Ramp	T-Ramp Property
US	United States
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

Rhēa Engineers & Consultants, Inc. (Rhēa), under contract to Camp Dresser and McKee (CDM) Smith Inc. (CDM Smith), was tasked to conduct an Environmental Baseline Survey (EBS) Phase II Investigation of the T-Ramp Property (T-Ramp) at Pittsburgh International Airport (IAP) Air Reserve Station (ARS). This investigation and report was prepared in general accordance with the ASTM International (ASTM) Standard Guide for Environmental Site Assessments (ESA): Phase II Environmental Site Assessment Process (ASTM Designation: E 1903-97, Re-approved 2002).

1.1 Purpose

The purpose of the EBS Phase II was to evaluate the recognized environmental conditions (REC) identified in the “*Environmental Baseline Survey Report, Additional Acreage from Allegheny County*” (Pittsburgh IAP ARS 911th AW, 1996) (1996 EBS) and/or screen said property for the purpose of providing sufficient information regarding the nature and extent of contamination to facilitate an informed business decision about the property.

1.2 Scope of Services

The scope of work for the investigation was in general accordance with the ASTM Standard Practices for ESAs: Phase II ESA Process (ASTM E1903-97, Re-approved 2002). These methodologies are described as representing good commercial and customary practice for conducting a Phase II ESA of a property for the purpose of evaluating RECs.

Specifically, the scope of work included the following tasks:

- + Review of Existing Information;
- + Field Exploration;
- + Sampling and Chemical Analyses;
- + Evaluation of Results; and
- + Discussion of Findings and Conclusions.

1.3 Special Terms and Conditions

The RECs for the T-Ramp property were assessed as identified in the 1996 EBS. The findings and conclusions presented in this report apply only to the RECs assessed.

1.4 Limitations and Exceptions of Assessments

This report has been prepared in accordance with generally accepted environmental methodologies referred to in ASTM 1903-97 (Re-approved 2002), and contains all the limitations inherent in these methodologies. No other warranties, expressed or implied, are made as to the professional services provided under the terms of Rhēa's contract with CDM Smith and, subsequently, the United States (US) Air Force.

1.5 Limiting Conditions and Methodologies Used

No ESA can eliminate all uncertainty. Furthermore, any surface or subsurface sample taken for chemical analysis may or may not be representative of a larger population. Professional judgment and interpretation are inherent in the process, and uncertainty is inevitable. Additional assessment may reduce the uncertainty.

Even when Phase II ESA work is executed with an appropriate site-specific standard of care, certain conditions present especially difficult detection problems. Such conditions may include, but are not limited to, complex geological settings, the fate and transport characteristics of certain hazardous substances and petroleum products, the distribution of existing contamination, physical limitations imposed by the location of utilities and other man-made objects and obstacles, and limitations of assessment technologies.

Phase II ESAs do not generally require an exhaustive assessment of environmental conditions on a property. There is a point at which the cost of information obtained and the time required to obtain it outweigh the usefulness of the information and, in fact, may be materially detrimental to the orderly completion of transactions. If hazardous substances or petroleum releases are confirmed on a parcel of property, the extent of further assessment is related to the degree of uncertainty that is acceptable to the user with respect to the real estate transaction.

Measurements and sampling data only represent the site conditions at the time and location of the data collection; therefore, the usability of data collected as part of this Phase II Investigation may have a finite lifetime depending on the data application and use. An environmental professional should evaluate whether the generated data are appropriate for any subsequent use beyond the original purpose for which it was collected.

2.0 BACKGROUND

2.1 Site Description and Features

The T-Ramp is currently owned by the Allegheny County Airport Authority (ACAA) and has been leased by the 911th Airlift Wing (911 AW) since 1993 under Memorandum of Agreement (MOA) No. 032076. The T-Ramp property covers approximately 26 acres, and is located adjacent to, and north of, the current 911 AW apron at Pittsburgh IAP, as seen in Figure 1 – Site Location Map. The primary purpose of the MOA was to provide space for the 911 AW to relocate C130 aircraft for parking purposes during construction activity on the primary aircraft apron.

2.2 Physical Setting

As stated above, the T-Ramp is currently leased by the 911 AW and used to temporarily park aircraft during construction activity on the primary aircraft apron. The site is relatively flat and, with the exception of a few grassy islands, is almost entirely paved with concrete and asphalt. There are no permanent buildings or structures on the property.

2.3 Site History and Land Use

Prior to 1973, the T-Ramp property was primarily undeveloped land that served as the approach to former Runway 23 at the former Greater Pittsburgh International Airport (GPIA). A more detailed history of the T-Ramp property is summarized in Section 3.1 of the 1996 EBS as stated below:

“The former GPIA lies within the commercial district of Moon Township. The site is located to the south of Business Route 60 between the Coraopolis/Moon Interchange and Beer School Road.

The following is a summary of major construction/operations activity at the GPIA:

- *1946 - Construction of an Army infield;*
- *1952 - Main terminal opened as a commercial airport;*
- *1952 - Fuel farm and jet fuel distribution system operational;*
- *1959 - East dock was added to the main terminal building;*
- *1969 - International arrivals added;*
- *1971 - West Dock and the rotundas at the end of the south and east dock were constructed;*

- 1979 - Construction of the southeast dock;
- 1980 - Construction of deicing pad for USAIR; and
- 1992 - GPIA Terminal Closed.

Prior to initial airfield operation in the 1940's the area was used as farmland.

On October 1, 1992, the Allegheny County Department of Aviation (ACDA) transferred commercial aircraft operation from the former GPIA terminal to the new Pittsburgh IAP. The fuel farm area and the Jet Fuel Distribution system at the GPIA have been inoperative since that time."

2.4 Adjacent Property Use

The current adjoining properties to the T-Ramp and their use are noted, by relative compass direction, as follows:

2.4.1 North/Northwest

The area immediately north of the T-Ramp is wooded and slopes steeply downward to the north. Approximately 200 feet north of the T-Ramp is a parking lot associated with the Airside Business Park. To the northwest of the T-Ramp is an eight-foot-tall chain link fence separating the T-Ramp from the Heinz Jet Hangar, a private hangar that houses multiple aircraft for the H.J. Heinz Company.

2.4.2 Northeast

The area immediately northeast of the T-Ramp is an undeveloped area with thick brush and non-maintained grass. Approximately 300 feet downslope from the northeast boundary is Lindbergh Drive, which services the Airside Business Park. Located approximately 700 feet from the northeast boundary is the Thorn Run Road Interchange with Interstate 376.

2.4.3 West and South

The property adjoining the T-Ramp to the west and south is leased by the 911 AW from the ACAA. The 911 AW facilities adjacent to the T-Ramp include the Fuel Farm (which includes Building 102) and Airplane Repair Hangars 416 and 417. Although not part of the 911 AW property, the Moon Township Water Tower is adjacent to the T-Ramp between the Fuel Farm and Building 416. Directly to the south is the main 911 AW aircraft apron.

2.4.4 East

The area immediately to the east of the T-Ramp is an almost entirely concrete paved area that serves as an area for 911 AW aircraft to taxi.

2.5 Summary of Previous Assessments

Documents reviewed for the preparation of this Phase II Investigation are listed in Attachment A. In addition to the 1996 EBS developed by the 911 AW for the T-Ramp property in 1996, the most relevant documents reviewed were related to the former Greater Pittsburgh International Airport Old Terminal property that served as the airport passenger terminal from 1952 to 1992, when the new Midfield Terminal opened. The Old Terminal remained vacant until it was demolished in 1999. Specifically, documents were reviewed that were related to the Old Terminal Fuel Distribution System (see Attachment A, Reference Nos. 1, 2, 5, 6, 7, 10, 11, 14, 16, and 17) and the Old Terminal Fuel Farm Area (see Attachment A, Reference Nos. 3, 4, 12, 13, 15, 18, and 19).

The most relevant document reviewed was the “Final Report” for the Pittsburgh International Airport, Old Terminal, Fuel Distribution Area, which was prepared for the ACAA by CDM on January 6, 2004 (see Attachment A, Reference Nos. 5). The Executive Summary (see Attachment A, Reference No. 5) is provided as follows:

“Between the 1950s and 1992, the Fuel Distribution System at the former Greater Pittsburgh International Airport Old Terminal was in operation in Moon Township, Pennsylvania. Jet-A fuel was conveyed from the adjacent Fuel Farm through underground piping around the airplane docks of the former Old Terminal where airplane refueling took place. Jet-A fuel was released into the environment through leaks and spills during this time period. Camp Dresser & McKee (CDM) was retained by the Allegheny County Department of Aviation, now known as the Allegheny County Airport Authority (ACAA) to decommission and investigate the fueling system.

Site characterization activities occurred between 1993 and 2000. Site characterization activities included soil boring and sampling/ analysis, monitoring well installation and groundwater sampling/ analysis, and

hydrogeological investigations. Investigated media include soil, groundwater, and stormwater.

Soil and groundwater standards for the Fuel Distribution System at the former Greater Pittsburgh International Airport Old Terminal were selected from the Pennsylvania Department of Environmental Protection (PADEP) Recycling Program (Act 2). Site-Specific standards for were developed for six soil "sites" using the risk assessment that was included in the 1997 Cleanup Plan for the Fuel Distribution System. Statewide health, non-use aquifer standards were approved by PADEP on December 30, 1999 and were applied to groundwater.

Soil remediation was conducted at the six "sites" along the Fuel Distribution System in the summer of 1997. The selected remediation alternative was excavation of impacted soil and proper off-site disposal. CDM provided direction and oversight of the soil remediation activities. A total of 2,305 tons (approximately 1,350 cubic yards) of soil was excavated and transported to the BFI Imperial landfill for disposal.

The post-excavation soil sampling and remediation was completed at the six "sites" as specified in the PADEP-approved January 1997 Cleanup Plan. A total of 34 samples were collected to demonstrate attainment with the Site-Specific soil standards. The constituents analyzed include petroleum hydrocarbons-diesel range organics (PHC-DRO), benzene, toluene, ethylbenzene, xylenes, cumene, trimethylbenzenes, and butylbenzenes. None of the 34 soil samples obtained from the six soil remediation areas exceeded the cleanup levels for their respective area.

Analytical data revealed that demonstration of attainment for soil has been achieved at the six remediation "sites". Therefore, CDM recommends no further action for soil and requests a release of liability for the six soil "sites" for the ACAA.

Groundwater samples from the onsite monitoring wells had petroleum constituent concentrations below the PADEP Statewide health, non-use aquifer, non-residential groundwater standards. A contaminant plume does not exist in groundwater encountered in bedrock aquifers or perched water. Therefore, CDM recommends no further action for groundwater.

Analytical data revealed that stormwater samples had organic petroleum constituent concentrations below the applicable PADEP

groundwater standards; therefore, petroleum contaminants did not impact perched water or surface water bodies.”

It is important to clarify that, as part of the environmental investigation for this site, CDM installed and sampled 16 groundwater monitoring wells and collected over 1,100 soil samples from the four dock areas in the vicinity of the 217 fuel distribution system service pits as part of the 1997 Cleanup Plan for the Fuel Distribution System (dated January 1997 and provided as Attachment A, Reference No. 2). The analytical results indicated that isolated areas of petroleum hydrocarbon compounds, indicative of Jet-A fuel, existed at concentrations greater than the PA Act 2 Statewide Human Health Standards, around individual service pit structures and along segments of the fuel distribution pipeline backfill. Based on the findings of the soil and groundwater investigations, the PA Act 2 regulations, and the intended future use of the property, it was necessary for CDM to conduct a risk assessment to determine the potential impact of petroleum hydrocarbon compounds to human health through various exposure pathways. The risk assessment is included in the 1997 Cleanup Plan for the Fuel Distribution System (see Attachment A, Reference No. 2).

As a result of this risk-assessment, CDM developed and obtained PADEP approval for the following site-specific soil standards:

For areas within 50 feet of future buildings:

- + 14,000 milligrams/kilogram (mg/kg) petroleum hydrocarbons-diesel range organics (PHC-DRO)
- + 1.8 mg/kg benzene
- + 6,900 mg/kg toluene
- + 40,200 mg/kg ethylbenzene
- + 760 mg/kg cumene
- + 1,760 mg/kg trimethylbenzenes
- + 3,800 mg/kg butylbenzenes

For areas greater than 50 feet from future buildings:

- + 19,000 mg/kg PHC-DRO

The six soil remediation sites referenced in the Final Report were the only areas identified where soils exceeded these PADEP-approved site-specific standards. As previously stated, remediation of these six sites included excavation and proper off-site disposal of soils that exceeded the site-specific

cleanup standards. On January 7, 2004, ACAA received Act 2 liability protection from PADEP, which required a deed notice because the site attained a site-specific standard for soil.

The former location of the Old Terminal Southeast Dock was previously located within the general area of the proposed western lease line boundary of the T-Ramp property. It also appears that Soil Remediation Area No. 2, may be near or within the proposed western lease line boundary of the T-Ramp property. The other five Soil Remediation Areas appear to be west and northwest of the T-Ramp property as described below:

- + Area No. 1, which is located north of the former Main Terminal East Dock and approximately 1,000 feet west of the T-Ramp property.
- + Areas No. 3 and 4, which are located south of the former Main Terminal Southeast Dock and approximately 500 and 600 feet west of the T-Ramp property, respectively.
- + Area No. 5 and 6, which are located west of the former Main Terminal West Dock and approximately 2,300 feet west of the T-Ramp property.

3.0 PHASE II ACTIVITIES

3.1 Scope of Assessment

3.1.1 Supplemental Record Review

Included in the documents listed in Attachment A, is an Environmental Data Resources (EDR) Report that was purchased by CDM Smith. The EDR Report performs an electronic search of environmental records and is designed to facilitate search requirements for ESAs. The following list of records was searched by EDR with subsequent review by the CDM Smith Team:

National Priority List	Proposed National Priority List
Federal Superfund Liens	National Priority List Deletions
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Information System (CERCLIS)	Federal Facility Site Information Listing
CERCLIS No Further Remedial Action Planned	Corrective Action Report
Resource Conservation and Recovery Act (RCRA) – Treatment, Storage, and Disposal	RCRA – Conditionally Exempt Small Quantity Generator
Engineering Controls Sites List	Sites with Institutional Controls
Emergency Response Notification System	Hazardous Sites Cleanup Act Site List
Hazardous Sites Cleanup Act (HSCA) Remedial Sites Listing	Operating Facilities – Landfills
Unregulated Tank Cases	Storage Tank Release Sites
Leaking Underground Storage Tanks (USTs) on Indian Land	Listing of PA Regulated USTs
USTs on Indian Land	UST Listing
Engineering Controls Site Listing	Institutional Controls Site Listing
Environmental Covenants Listing	Voluntary Cleanup Program Listing
Voluntary Cleanup Priority Listing	State & Tribal Brownfields Sites
Listing of Local Brownfields Sites	Open Dump Inventory
Torres Martinez Reservation Illegal Dump Site Locations	Abandoned Landfill Inventory
Report on the Status of Open Dumps on Indian Lands	Clandestine Drug Labs
Archived UST Sites	Archived Aboveground Storage Tank

	Sites
CERCLA Lien Information	Land Use Control Information System
Hazardous Materials Information Reporting System	State Spills
RCRA – Non Generators	

3.1.2 Sampling and Analysis Plan

The Sampling and Analysis Plan was designed to provide for the collection of potentially contaminated environmental media, if they occur, at locations and depths where the highest concentrations are likely to occur. The strategy for assigning sampling locations as provided on Figure 2 - Sample Layout Map was derived primarily from the documents referenced in Attachment A. Additional soil borings were located in the general vicinity of the former Old Terminal East and Southeast Docks due to historic contamination in these areas.

This Sampling and Analysis Plan was developed in general accordance with the United States Environmental Protection Agency (USEPA) “Guidance for Performing Site Inspections under Comprehensive Environmental Response, Compensation, and Liability Act.”

During sampling, personal health and safety precautions were followed in accordance with applicable federal and state law or local equivalents and requirements imposed by the 911 AW, ACAA, and the CDM Smith team.

The Sampling and Analysis Plan was also designed to detect the contaminants suspected to be present in the samples collected. The Sampling and Analysis Plan included tests that provide quality assurance (QA) and techniques that provide quality control (QC) over the chemical analyses. The QA/QC samples collected in the field included duplicate, matrix spike/matrix spike duplicate (MS/MSD), trip blank, field blank, and equipment blank samples. Temperature blanks were provided by the laboratory and included with each required cooler submitted for analysis. A completed chain of custody record accompanied each sample shipment to the analytical laboratory. Chain of custody records provide written documentation regarding sample collections and handling, identify the persons involved in the chain of sample possession, and a written record of requested analytical parameters.

3.1.3 Deviations from the Sampling and Analysis Plan

Boring K-6, per the original Sampling and Analysis Plan, was initially intended to serve as a temporary monitoring well location. During the installation of the temporary monitoring well, difficult subsurface drilling conditions were encountered which resulted in the malfunction of the drilling rig itself, breaking the coupler that connects the drill auger to the drill motor. As a result of an ongoing construction project unrelated to the T-Ramp Phase II Investigation, a cross section of the subsurface adjacent to boring K-6 can be viewed. This cross section revealed an apparent presence of fill material including rebar-reinforced concrete “boulder”-sized material. It is likely that the drill malfunction was a result of the auger head “catching” a piece of the concrete below the surface, resulting in the mechanical malfunction. The CDM Smith Team decided to use this location as a soil boring only and discontinued drilling as a temporary well location.

No soil sample from boring D-7 was submitted for laboratory analysis. The only soil sample collected from the boring, prior to encountering shallow bedrock, resulted in three inches of recovery from the two-foot-long split spoon and was composed almost entirely of rock fragments that were unsuitable for laboratory analysis. The remaining boring was drilled, and a water sample was subsequently collected.

Due to the firmly fixed nature of the project price and the time constraints imposed by the general operations of the 911 AW, the Work Plan called for soil sampling at 2.5 foot centers. However, given the relatively shallow depth to bedrock encountered in the subsurface conditions and project progress, soil samples were collected continuously throughout the borings, providing a more detailed subsurface description.

3.2 Field Explorations and Methods

3.2.1 Test Pits

No test pits were excavated as part of this Phase II Investigation.

3.2.2 Test Borings

A total of 27 borings were drilled at the locations as shown on Figure 2 – Sample Location Map. Drilling of these borings began on April 2, 2012 and was completed on April 25, 2012. The depths of these borings ranged from 4.3 to 78.0 feet below ground surface (bgs). As stated in Section 3.1.2, the strategy for assigning the selected sampling locations was derived primarily from the documents referenced in Attachment A with additional soil borings

located in the general vicinity of the former Old Terminal East and Southeast Docks due to the presence of historic contamination in these areas.

3.2.3 Monitoring Well Installations

Eight of the 27 soil borings were converted to temporary monitoring wells upon completion of soil sampling activities, in accordance with PA Well Construction Standards as defined in the PADEP's Groundwater Monitoring Guidance Manual (December, 2001). The temporary wells were installed to a depth of 10 feet below the presence of fractured bedrock aquifer or a maximum depth of 75 feet bgs by advancing a 4.25-inch diameter hollow-stem auger (HSA) through soil, and a four-inch diameter air hammer through bedrock. Temporary monitoring wells were constructed using two-inch-diameter, Schedule 40 polyvinyl chloride (PVC) 0.010-inch slotted screen, and solid PVC riser piping to ground surface. A sand pack was installed two feet above the top of the screen, and a bentonite chip (3/8-inch) seal was placed on top of the sand filter pack. The remaining annular space was filled with bentonite chips to the ground surface.

The temporary monitoring wells were abandoned in accordance with PA Well Construction Standards. The wells were abandoned by pulling the well casing and backfilling the resulting borehole/casing with a cement/bentonite grout to correspond with the elevation of the bottom of the concrete apron. Borings that were advanced through the concrete apron were finished flush to grade with concrete mix (per ACAA standard). Borings advanced through grassy, non-paved areas were backfilled with non-stained soil cuttings and topsoil.

3.2.4 Other

No other assessment activities were conducted.

3.3 Sampling and Chemical Analyses

3.3.1 Soil

Soil samples were recovered at two-foot intervals, using a stainless steel, split-spoon sampler, and visually classified. The soil samples were screened for Volatile Organic Compounds (VOCs) in the field using a photoionization detector (PID) calibrated to 100 parts per million (ppm) isobutylene. Borings identified as a soil boring only, as detailed in Figure 2, were advanced to a total depth of 25 feet bgs or until sampler refusal was reached with a 3.25-inch-diameter HSA. Sampler refusal is defined as 50 or more blow counts over one vertical inch using a drill mounted auto hammer or safety hammer

to drive the sampler. Borings identified as temporary well borings were advanced through the soil using a 4.25-inch-diameter HSA. All borings through concrete were cored with a portable thin-wall core drill and 13-inch-diameter diamond-coated, thin-wall bit. Following the coring of concrete, drilling commenced, and soil samples were retrieved via standard penetration testing (SPT), from which split-spoon samples were collected at continuous intervals, with a portion of the soil interval being placed into a labeled, re-sealable plastic bag using disposable nitrile gloves. These bag-portioned soil samples were sealed and kept (minimum of 20 minutes post-boring) at ambient temperature for field screening with a PID. The soil sample collected from the depth interval within each boring that corresponded to the highest PID reading was submitted to the laboratory for chemical analysis. Soil samples were analyzed for the presence of compounds from the target compound list (TCL) (including PA UST jet fuel parameters) VOCs, and total lead. Pace Analytical Services, Inc. (Pace), a PADEP-certified laboratory, performed the laboratory analytical services.

3.3.2 Groundwater

Following the installation of the temporary monitoring wells, groundwater samples were collected using low-flow groundwater sampling methodology. Each well was purged immediately before sampling using a low-flow bladder pump and dual-bonded tubing at a rate equal to or less than the groundwater recharge rate. Wells were purged for one hour or until field parameters (dissolved oxygen [DO], temperature, pH, conductivity, oxidation-reduction potential [ORP], and turbidity) and water level stabilized, whichever occurred first. Field parameters and depth-to-water were measured approximately every five minutes and considered stable once they met the following requirements for three consecutive readings:

- + DO [$\pm 3\%$]
- + pH [± 0.1 standard units]
- + Conductivity [$\pm 10\%$]
- + ORP [$\pm 10\%$]
- + Turbidity <10 nephelometric turbidity units (NTU), or as low as practicable

Groundwater samples were collected into laboratory-supplied containers and submitted to the laboratory and analyzed for the presence of compounds from the TCL (including PA UST jet fuel parameters) VOCs, dissolved lead, and EDB.

3.3.3 Other

No other chemical analyses were performed.

4.0 EVALUATION AND PRESENTATION OF RESULTS

4.1 Subsurface Conditions

4.1.1 Geologic Setting

The T-Ramp is located within the Pittsburgh Low Plateau Section of the Appalachian Physiographic Province. Regional geography is generally described as having broad, relatively flat anticlinal ridges. Bedrock for this region is generally Pennsylvanian in age (DCNR, 2002).

The 1996 EBS describes the overburden soil as clay and silt overlying sedimentary bedrock that has undergone cut and fill episodes during the different phases of airport construction. The boring logs, as provided in Attachment B, support this statement. The subsurface investigation revealed that asphalt and concrete covered most of the T-Ramp. Asphalt and concrete ranged in thickness from 1.5 feet to 2.5 feet bgs with overburden throughout ranging from approximately two feet to 24.5 feet bgs. Although rock cores were not collected as part of this Phase II Investigation, the majority of rock fragments retrieved by the split-spoon were highly weathered shale and hard, highly fractured sandstone.

4.1.2 Hydrogeologic Conditions

Groundwater at the T-Ramp was encountered as shallow at four feet bgs (Boring L-2) and as deep as 57 feet bgs (Boring H-0). Due to the varying groundwater depths, a distinguishable groundwater direction could not be clearly ascertained based on the water levels obtained from the temporary monitoring wells during the investigation. This is likely a result of the varying types and thicknesses of fill used throughout the T-Ramp during construction.

4.1.3 Verification of Conceptual Site Model

The geologic setting and hydrogeologic conditions, as discussed above, and the Sampling and Analysis Plan developed for the site were verified during the Phase II Investigation assessment activities. The QA/QC procedures described in the Sampling and Analysis Plan were adequate to verify data acceptability.

4.2 Analytical Data

4.2.1 Soil

Liquid-phase petroleum hydrocarbons (LPH) and visually evident staining of soil was not observed within any of the borings during the soil classification activities.

As stated above, soil vapor screening was conducted in the field using a PID. Soil vapors are often used as a field screening tool to practically identify soils that are likely impacted with petroleum hydrocarbons. During the field investigation at the T-Ramp, the highest PID reading was 203.8 ppm from boring F-1 within the 12- to 14-foot interval. PID results for all borings are summarized in Table 2 – Summary of Soil Borings and Temporary Well Data.

The soil analytical results, along with the applicable PA Act 2 Standards are summarized in Table 1 – Summary of Analytical Results to applicable Act 2 Standards. The soil standards chosen for comparison are the PA Act 2 Standards, Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, as defined by Tables 3 and 4 in Appendix A of Pennsylvania Code, Title 25, Chapter 250. All samples tested had measured concentrations below the standards or were “non-detect” in nature. The chain of custodies and analytical results, as provided directly from the laboratory, are also provided as Attachment C with data validation reports of the analytical results provided as Attachment D.

4.2.2 Groundwater

Groundwater levels were measured using an oil-water interface probe, which not only identifies the depth of the water table but also detects any measurable LPH. LPH was not detected using this probe and was not observed visually during the collection of groundwater samples.

The groundwater analytical results, and applicable PA Act 2 Standards, are summarized in Table 1. The groundwater applicable PA Act 2 Standards chosen for comparison are the PA Act 2 Standards, MSCs for Organic and Inorganic Regulated Substances in Soil, as defined by Tables 1 and 2 in Appendix A of Pennsylvania Code, Title 25, Chapter 250. All samples tested had measured concentrations below the applicable PA Act 2 Standards. Chain of custodies and analytical results, as provided directly from the laboratory are also provided as Attachment C with data validation reports of the analytical results provided as Attachment D.

4.2.3 Other

There were no other analytical data obtained during this investigation.

5.0 DISCUSSION OF FINDINGS AND CONCLUSIONS

This assessment has been prepared in accordance with generally accepted environmental methodologies referred to in ASTM 1903-97 (Re-approved 2002), and contains all of the limitations inherent in these methodologies. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our contract and included in this report.

All deviations from the Sampling and Analysis Plan are discussed above in Section 3.1.4.

5.1 Recognized Environmental Conditions

The recognized on-site environmental conditions assessed as part of the EBS Phase II Investigation were the areas of the property previously categorized as a Category 6 and/or Category 7 in the above-referenced EBS Report. The assessments performed to evaluate the recognized on-site environmental conditions included the following:

- + Twenty-six total soil samples were collected from the borings and submitted for laboratory analysis (a soil sample was not collected from D-7 due to difficult substructure drilling conditions).
- + Eight of the 27 borings were converted into temporary monitoring wells with a groundwater sample collected and submitted for laboratory analysis.
- + Laboratory analysis of soils included testing for TCL-VOCs via USEPA method 8260B and Total Lead via USEPA method 6010B.
- + Water samples were analyzed for TCL-VOCs, dissolved lead, and EDB via USEPA methods 8260B, 200.7, and 8011 respectively.

Results of these analyses indicated that all samples submitted for laboratory analyses, both soil and water, displayed levels that were either “non-detect” or were well below the selected PA Act 2 Standards.

5.2 Affected Media

Based on this Phase II investigation, no impacted soil above the PA Act 2 Standards was identified. Additionally, impacted groundwater above the PA Act 2 Standards was not identified.

5.3 Evaluation of Media Quality

There was sufficient data gathered during this investigation to determine whether hazardous substances or petroleum products were released or disposed at the property.

Based on previous documentation, hazardous substances or petroleum products may have previously been released or disposed at, or adjacent to, the T-Ramp. However, with respect to the RECs assessed, there is no evidence that a release at, or adjacent to, the T-Ramp has significantly impacted the property soil or groundwater.

5.4 Other Concerns

During the drilling activities at the site, several subsurface voids were encountered and required a large amount of grout to backfill the borings flush to the ground surface. The 1996 EBS interviews confirm that the T-Ramp area is comprised of extensive fill material. It is very likely that this fill was not appropriately engineered and/or compacted during construction. It is recommended that the current landowner or lease holder of the property consult a geotechnical engineer prior to the construction of any permanent structures within the site boundaries.

6.0 RECOMMENDATIONS

Based on the results of this assessment, no further environmental investigation at the T-Ramp is recommended. As previously noted, the presence of several voids in the subsurface indicates that a Geotechnical Engineering Investigation/Report should be completed prior to the construction of any permanent structure upon the property.

7.0 REFERENCES

ASTM International, 1997. *Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process, Designation: E 1903-97 (Re-approved 2002)*.

Pittsburgh IAP ARS 911th AW, 1996. *Environmental Baseline Survey, Additional Acreage from Allegheny County 911 AW/CE*. Pittsburgh International Airport ARS, CDM, July 5.

PADCNR, 2002. *The Geology of Pennsylvania*. Pennsylvania Department of Conservation and Natural Resources, Harrisburg, PA.

PADEP, 2002. *Land Recycling Program Technical Guidance Manual*. Pennsylvania Department of Environmental Protection – Document No. 253-0300-100. June 8.

USEPA, 1992. *Guidance for Performing Site Inspections under Comprehensive Environmental Response, Compensation, and Liability Act*. Interim Final, USEPA/540-R-92-021, PB92-963375. September.

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS COMPARED TO APPLICABLE ACT 2 STANDARDS
911th Airlift Wing T-Ramp - Soil Results
Coraopolis Township, Allegheny County, Pennsylvania



SAMPLE ID	Non-Residential Direct Contract MSC (0-2 feet) ^(a)	Non-Residential Direct Contract MSC (2-15 feet) ^(a)	TRAMP-J1-S-2-4	TRAMP-F1-S-4-6	TRAMP-L4-S-22-24	TRAMP-G3-S-9.5-11.5	TRAMP-D3-S-4-6	TRAMP-C4-S-4-6	DUP-1 TRAMP-C4-S-4-6	TRAMP-A5-S-2-4	TRAMP-A8-S-4-6	TRAMP-A7-S-2-4	TRAMP-D12-S-4-6
SAMPLE DATE			4/2/2012	4/2/2012	4/3/2012	4/3/2012	4/4/2012	4/4/2012	4/4/2012	4/5/2012	4/5/2012	4/5/2012	4/9/2012
Volatile Organic Compounds (mg/kg) - EPA 8260													
Acetone	10,000	10,000	0.0652 B	0.0223 B	0.0204 B	0.0629 B	0.006 B	0.002 B	0.0017 U	0.0015 U	0.0018 U	0.0016 U	0.0037 B
Benzene	290	330	0.00075 U	0.0025 J	0.00084 U	0.0008 U	0.034	0.0017 J	0.003 J	0.0018 J	0.012	0.0039 J	0.022
Bromodichloromethane	60	69	0.0017 U	0.0018 U	0.0019 U	0.0018 U	0.0023 U	0.0016 U	0.0015 U	0.0014 U	0.0017 U	0.0015 U	0.0018 U
Bromoform	2,000	2,300	0.0024 U	0.0025 U	0.0027 U	0.0026 U	0.0033 U	0.0023 U	0.0022 U	0.002 U	0.0023 U	0.0021 U	0.0026 U
Bromomethane	400	460	0.0028 U	0.0029 U	0.0032 U	0.003 U	0.0038 U	0.0026 U	0.0025 U	0.0023 U	0.0027 U	0.0024 U	0.003 U
TOTAL BTEX			0.0068 U	0.0069 U	0.0076 U	0.0072 U	0.0437	0.0063 U	0.006 U	0.0055 U	0.012 J	0.0058 U	ND
2-Butanone (MEK)	2,000	2,300	0.0084 J	0.0039 J	0.004 J	0.0119	0.0097 J	0.0011 U	0.0011 U	0.00098 U	0.0012 U	0.001 U	0.0013 U
Carbon Disulfide	10,000	10,000	0.0026 J	0.0015 J	0.0034 J	0.0029 J	0.00099 U	0.0115	0.0081	0.00059 U	0.0034 J	0.0031 J	0.0063
Carbon Tetrachloride	150	170	0.00085 U	0.00087 U	0.00095 U	0.00091 U	0.0011 U	0.0008 U	0.00076 U	0.00069 U	0.00082 U	0.00073 U	0.0009 U
Chlorobenzene	4,000	4,600	0.00095 U	0.00096 U	0.0011 U	0.001 U	0.0013 U	0.00089 U	0.00084 U	0.00077 U	0.00092 U	0.00081 U	0.001 U
Chloroethane	10,000	10,000	0.0016 U	0.0016 U	0.0017 U	0.0017 U	0.0021 U	0.0015 U	0.0014 U	0.0013 U	0.0015 U	0.0013 U	0.0016 U
Chloroform	97	110	0.00068 U	0.00069 U	0.00076 U	0.00073 U	0.00092 U	0.00064 U	0.00061 U	0.00055 U	0.00066 U	0.00058 U	0.00072 U
Chloromethane	1,200	1,400	0.001 U	0.001 U	0.0011 U	0.0011 U	0.0014 U	0.00094 U	0.00089 U	0.00081 U	0.00097 U	0.00086 U	0.0011 U
Dibromochloromethane	82	95	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.002 U	0.0014 U	0.0013 U	0.0012 U	0.0014 U	0.0013 U	0.0015 U
1,2-Dibromoethane (EDB)	3.7	4.3	0.0025 U	0.0025 U	0.0028 U	0.0027 U	0.0034 U	0.0023 U	0.0022 U	0.002 U	0.0024 U	0.0021 U	0.0026 U
1,2-Dichlorobenzene	10,000	10,000	0.001 U	0.0011 U	0.0012 U	0.0011 U	0.0014 U	0.00098 U	0.00093 U	0.00085 U	0.001 U	0.00089 U	0.0011 U
1,3-Dichlorobenzene	8,400	10,000	0.0012 U	0.0012 U	0.0014 U	0.0013 U	0.0016 U	0.0011 U	0.0011 U	0.00098 U	0.0012 U	0.001 U	0.0013 U
1,4-Dichlorobenzene	200	230	0.0012 U	0.0012 U	0.0013 U	0.0012 U	0.0016 U	0.0011 U	0.001 U	0.00095 U	0.0011 U	0.001 U	0.0012 U
1,1-Dichloroethane	1,400	1,600	0.00076 U	0.00077 U	0.00085 U	0.00081 U	0.001 U	0.00071 U	0.00068 U	0.00061 U	0.00073 U	0.00065 U	0.0008 U
1,2-Dichloroethane	86	98	0.00087 U	0.00089 U	0.00098 U	0.00093 U	0.0012 U	0.00082 U	0.00078 U	0.00071 U	0.00084 U	0.00075 U	0.00092 U
1,2-Dichloroethane (Total)			0.0031 U	0.0032 U	0.0035 U	0.0034 U	0.0042 U	0.003 U	0.0028 U	0.0025 U	0.003 U	0.0027 U	ND
1,1-Dichloroethene	10,000	10,000	0.00078 U	0.00079 U	0.00087 U	0.00083 U	0.001 U	0.00073 U	0.00069 U	0.00063 U	0.00075 U	0.00066 U	0.00082 U
cis-1,2-Dichloroethene	10,000	10,000	0.0024 U	0.0024 U	0.0026 U	0.0025 U	0.0032 U	0.0022 U	0.0021 U	0.0019 U	0.0023 U	0.002 U	0.0025 U
trans-1,2-Dichloroethene	4,800	5,500	0.00078 U	0.0008 U	0.00088 U	0.00084 U	0.0011 U	0.00074 U	0.0007 U	0.00063 U	0.00076 U	0.00067 U	0.00083 U
1,2-Dichloropropane	220	260	0.0016 U	0.0016 U	0.0017 U	0.0017 U	0.0021 U	0.0015 U	0.0014 U	0.0013 U	0.0015 U	0.0013 U	0.0016 U
cis-1,3-Dichloropropene	-	-	0.0015 U	0.0015 U	0.0017 U	0.0016 U	0.002 U	0.0014 U	0.0013 U	0.0012 U	0.0015 U	0.0013 U	0.0016 U
trans-1,3-Dichloropropene	-	-	0.0016 U	0.0016 U	0.0017 U	0.0017 U	0.0021 U	0.0015 U	0.0014 U	0.0013 U	0.0015 U	0.0013 U	0.0016 U
Ethylbenzene	10,000	10,000	0.0025 U	0.0025 U	0.0028 U	0.0026 U	0.0033 U	0.0023 U	0.0022 U	0.002 U	0.0024 U	0.0021 U	0.0026 U
2-Hexanone			0.0011 U	0.0011 U	0.0013 U	0.0012 U	0.0015 U	0.0011 U	0.001 U	0.00091 U	0.0011 U	0.00097 U	ND
Isopropylbenzene (Cumene)	10,000	10,000	0.001 U	0.001 U	0.0011 U	0.0011 U	0.0014 U	0.00095 U	0.0009 U	0.00082 U	0.00098 U	0.00087 U	0.0011 U
Methylene Chloride	4,700	5,400	0.0013 U	0.0013 U	0.0014 U	0.0014 U	0.0017 U	0.0012 U	0.0011 U	0.001 U	0.0012 U	0.0011 U	0.0014 U
4-Methyl-2-pentanone (MIBK)	10,000	10,000	0.00099 U	0.0011 U	0.0011 U	0.0011 U	0.0013 U	0.00093 U	0.00088 U	0.0008 U	0.0019 U	0.00084 U	0.001 U
Methyl-tert-butyl ether	3,200	3,700	0.075 U	0.0069 U	0.00076 U	0.00073 U	0.00092 U	0.00064 U	0.00061 U	0.00055 U	0.00066 U	0.00058 U	0.00072 U
Naphthalene	56,000	190,000	0.0024 U	0.0025 U	0.0027 U	0.0026 U	0.0033 U	0.0023 U	0.0021 U	0.002 U	0.0035 J	0.0021 U	0.0025 U
Styrene	10,000	10,000	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0014 U	0.001 U	0.00095 U	0.00086 U	0.001 U	0.00091 U	0.0011 U
1,1,2,2-Tetrachloroethane	38	44	0.00085 U	0.00086 U	0.00095 U	0.00091 U	0.0011 U	0.0008 U	0.00076 U	0.00069 U	0.00082 U	0.00073 U	0.0009 U
Tetrachloroethene	1,500	4,400	0.0007 U	0.00071 U	0.00078 U	0.00074 U	0.00094 U	0.00065 U	0.00062 U	0.00056 U	0.00067 U	0.0006 U	0.00073 U
Toluene	10,000	10,000	0.00062 U	0.0026 J	0.00069 U	0.00066 U	0.0097	0.00081 J	0.00056 J	0.0005 U	0.0032 U	0.00057 J	0.0087
1,1,1-Trichloroethane	10,000	10,000	0.0025 U	0.0025 U	0.0028 U	0.0027 U	0.0034 U	0.0023 U	0.0022 U	0.002 U	0.0024 U	0.0021 U	0.0026 U
1,1,2-Trichloroethane	140	160	0.00088 U	0.0009 U	0.00099 U	0.00094 U	0.0012 U	0.00083 U	0.00078 U	0.00071 U	0.00085 U	0.00076 U	0.00093 U
Trichloroethene	1,300	1,500	0.00072 U	0.00074 U	0.00081 U	0.00077 U	0.00098 U	0.00068 U	0.00064 U	0.00059 U	0.0007 U	0.00062 U	0.00076 U
1,2,4-Trimethylbenzene	560	640	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0015 U	0.001 U	0.00099 U	0.0009 U	0.0049	0.00095 U	0.0013 J
1,3,5-Trimethylbenzene	480	550	0.0013 U	0.0013 U	0.0014 U	0.0014 U	0.0017 U	0.0012 U	0.0012 U	0.001 U	0.0013 U	0.0011 U	0.0014 U
Vinyl chloride	110	580	0.00077 U	0.00079 U	0.00087 U	0.00083 U	0.001 U	0.00073 U	0.00069 U	0.00063 U	0.00075 U	0.00066 U	0.00082 U
Xylene (Total)	8,000	9,100	0.29 U	0.003 U	0.0033 U	0.0031 U	0.0039 U	0.0028 U	0.0026 U	0.0024 U	0.0028 U	0.0025 U	0.0049 J
m&p-Xylene	-	-	0.0018 U	0.0019 U	0.0021 U	0.002 U	0.0025 U	0.0017 U	0.0016 U	0.0015 U	0.0018 U	0.0016 U	0.0028 J
o-Xylene	-	-	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0015 U	0.001 U	0.00096 U	0.00088 U	0.001 U	0.00093 U	0.0021 J
Total Metals (mg/kg) - EPA 3050													
Lead	1,000	190,000	19.6	30.9	25.5	18.3	14.8	13.1	15.9	16.1	13.2	16.7	17.2

Notes:
(a) PADEP Medium Specific Concentrations (MSCs), January 8, 2011.
(b) Bold, grey shaded values shall be used to determine compliance with Act 2.
(c) NA - Not applicable.
(d) ND - Not Detected
(e) U - Indicates the compound was analyzed for, but not detected
(f) J - Estiamted concentration above the adjusted method detection limit and below the adjusted reporting limit.
(g) **B** - The analyte was detected substantially above the level reported in laboratory or field blanks (EPA Region III).
"- " CAS RN not included in ACT 2 Standards Table

TABLE 1
SUMMARY OF ANALYTICAL RESULTS COMPARED TO APPLICABLE ACT 2 STANDARDS
911th Airlift Wing T-Ramp - Soil Results
Coraopolis Township, Allegheny County, Pennsylvania



SAMPLE ID	Non-Residential Direct Contract MSC (0-2 feet) ^(a)	Non-Residential Direct Contract MSC (2-15 feet) ^(a)	TRAMP-H8-S-15-17	TRAMP-F5-S-6-8	TRAMP-E9-S-2-4	TRAMP-H6-S-14-16	TRAMP-L2-S-6-8	DUP-2 TRAMP-L2-S-6-8	TRAMP-A14-S-2-4	TRAMP-A10-S-2-4	TRAMP-B13-S-2-4	TRAMP-A11-S-2-4	TRAMP-I4-S-2-4
SAMPLE DATE			4/9/2012	4/6/2012	4/9/2012	4/6/2012	4/11/2012	4/11/2012	4/11/2012	4/11/2012	4/11/2012	4/12/2012	4/19/2012
Volatile Organic Compounds (mg/kg) - EPA 8260													
Acetone	10,000	10,000	0.013 B	0.039 B	0.0016 U	0.0029 B	0.024 B	0.023 B	0.011 B	0.0025 U	0.0081 B	0.0019 U	0.036 B
Benzene	290	330	0.00084 U	0.00073 U	0.0021 J	0.0059	0.00093 J	0.0019 J	0.0064	0.0013 J	0.00086 J	0.0036 J	0.0023 J
Bromodichloromethane	60	69	0.002 U	0.0017 U	0.0015 U	0.0015 U	0.0017 U	0.0018 U	0.0016 U	0.0024 U	0.0017 U	0.0018 U	0.0017 U
Bromoform	2,000	2,300	0.0027 U	0.0024 U	0.0021 U	0.0021 U	0.0024 U	0.0025 U	0.0022 U	0.0033 U	0.0024 U	0.0025 U	0.0023 U
Bromomethane	400	460	0.0032 U	0.0028 U	0.0025 U	0.0024 U	0.0028 U	0.0029 U	0.0025 U	0.0038 U	0.0028 U	0.0029 U	0.0027 U
TOTAL BTEX			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	2,000	2,300	0.0014 U	0.0068 J	0.0011 U	0.001 U	0.0066 J	0.0093 J	0.0068 J	0.0016 U	0.0012 U	0.0013 U	0.0012 U
Carbon Disulfide	10,000	10,000	0.0072	0.0027 J	0.0017 J	0.0021 J	0.0035 J	0.0042 J	0.0066 U	0.091	0.019	0.0022 J	0.0024 J
Carbon Tetrachloride	150	170	0.00096 U	0.00083 U	0.00075 U	0.00073 U	0.00085 U	0.00087 U	0.00076 U	0.0012 U	0.00086 U	0.00088 U	0.00082 U
Chlorobenzene	4,000	4,600	0.0011 U	0.00093 U	0.00083 U	0.00081 U	0.00095 U	0.00097 U	0.00085 U	0.0013 U	0.00095 U	0.00098 U	0.00091 U
Chloroethane	10,000	10,000	0.0018 U	0.0015 U	0.0014 U	0.0013 U	0.0016 U	0.0016 U	0.0014 U	0.0021 U	0.0016 U	0.0016 U	0.0015 U
Chloroform	97	110	0.00077 U	0.00067 U	0.0006 U	0.00058 U	0.00068 U	0.00069 U	0.00061 U	0.00092 U	0.00069 U	0.00071 U	0.00066 U
Chloromethane	1,200	1,400	0.0011 U	0.00098 U	0.00088 U	0.00086 U	0.001 U	0.001 U	0.0009 U	0.0014 U	0.001 U	0.001 U	0.00097 U
Dibromochloromethane	82	95	0.0017 U	0.0014 U	0.0013 U	0.0013 U	0.0015 U	0.0015 U	0.0013 U	0.002 U	0.0015 U	0.0015 U	0.0014 U
1,2-Dibromoethane (EDB)	3.7	4.3	0.0028 U	0.0024 U	0.0022 U	0.0021 U	0.0025 U	0.0025 U	0.0022 U	0.0034 U	0.0025 U	0.0026 U	0.0024 U
1,2-Dichlorobenzene	10,000	10,000	0.0012 U	0.001 U	0.00091 U	0.00089 U	0.001 U	0.0011 U	0.00093 U	0.0014 U	0.0011 U	0.0011 U	0.001 U
1,3-Dichlorobenzene	8,400	10,000	0.0014 U	0.0012 U	0.0011 U	0.001 U	0.0012 U	0.0012 U	0.0011 U	0.0017 U	0.0012 U	0.0013 U	0.0012 U
1,4-Dichlorobenzene	200	230	0.0013 U	0.0011 U	0.001 U	0.001 U	0.0012 U	0.0012 U	0.001 U	0.0016 U	0.0012 U	0.0012 U	0.0011 U
1,1-Dichloroethane	1,400	1,600	0.00086 U	0.00074 U	0.00066 U	0.00065 U	0.00076 U	0.00077 U	0.00068 U	0.001 U	0.00076 U	0.00079 U	0.00073 U
1,2-Dichloroethane	86	98	0.00098 U	0.00085 U	0.00076 U	0.00075 U	0.00087 U	0.00078 U	0.00078 U	0.0012 U	0.00088 U	0.0009 U	0.00084 U
1,2-Dichloroethane (Total)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	10,000	10,000	0.00088 U	0.00076 U	0.00068 U	0.00067 U	0.00078 U	0.00079 U	0.0007 U	0.0011 U	0.00078 U	0.00081 U	0.00075 U
cis-1,2-Dichloroethene	10,000	10,000	0.0027 U	0.0023 U	0.0021 U	0.002 U	0.0024 U	0.0024 U	0.0021 U	0.0032 U	0.0024 U	0.0024 U	0.0023 U
trans-1,2-Dichloroethene	4,800	5,500	0.00088 U	0.00077 U	0.00069 U	0.00067 U	0.00079 U	0.0008 U	0.0007 U	0.0011 U	0.00079 U	0.00081 U	0.00076 U
1,2-Dichloropropane	220	260	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0016 U	0.0016 U	0.0014 U	0.0021 U	0.0016 U	0.0016 U	0.0015 U
cis-1,3-Dichloropropene	-	-	0.0017 U	0.0015 U	0.0013 U	0.0013 U	0.0015 U	0.0015 U	0.0013 U	0.002 U	0.0015 U	0.0016 U	0.0014 U
trans-1,3-Dichloropropene	-	-	0.0018 U	0.0015 U	0.0014 U	0.0013 U	0.0016 U	0.0016 U	0.0014 U	0.0021 U	0.0016 U	0.0016 U	0.0015 U
Ethylbenzene	10,000	10,000	0.0028 U	0.0024 U	0.0022 U	0.0021 U	0.0025 U	0.0025 U	0.0022 U	0.0033 U	0.0025 U	0.0026 U	0.0024 U
2-Hexanone			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	10,000	10,000	0.0011 U	0.00099 U	0.00089 U	0.00087 U	0.001 U	0.001 U	0.00091 U	0.0014 U	0.001 U	0.0011 U	0.00098 U
Methylene Chloride	4,700	5,400	0.0014 U	0.0013 U	0.0011 U	0.0011 U	0.0013 U	0.0013 U	0.0011 U	0.0017 U	0.0013 U	0.0013 U	0.0012 U
4-Methyl-2-pentanone (MIBK)	10,000	10,000	0.0011 U	0.00096 U	0.00086 U	0.00085 U	0.00099 U	0.001 U	0.00088 U	0.0013 U	0.00099 U	0.001 U	0.00095 U
Methyl-tert-butyl ether	3,200	3,700	0.00077 U	0.00067 U	0.0006 U	0.00058 U	0.00068 U	0.00069 U	0.00061 U	0.00092 U	0.00069 U	0.00071 U	0.00066 U
Naphthalene	56,000	190,000	0.0027 U	0.0024 U	0.0021 U	0.0021 U	0.0024 U	0.0025 U	0.0022 U	0.0033 U	0.0024 U	0.0025 U	0.0023 U
Styrene	10,000	10,000	0.0012 U	0.001 U	0.00093 U	0.00091 U	0.0011 U	0.0011 U	0.00095 U	0.0014 U	0.0011 U	0.0011 U	0.001 U
1,1,2,2-Tetrachloroethane	38	44	0.00096 U	0.00083 U	0.00074 U	0.00073 U	0.00085 U	0.00087 U	0.00076 U	0.0012 U	0.00085 U	0.00088 U	0.00082 U
Tetrachloroethene	1,500	4,400	0.00078 U	0.00068 U	0.00061 U	0.0006 U	0.0007 U	0.00071 U	0.00062 U	0.00094 U	0.0007 U	0.00072 U	0.00067 U
Toluene	10,000	10,000	0.00069 U	0.0006 U	0.00088 J	0.0011 J	0.00074 J	0.0014 J	0.0059	0.00084 U	0.00066 J	0.0007 J	0.0008 J
1,1,1-Trichloroethane	10,000	10,000	0.0028 U	0.0024 U	0.0022 U	0.0021 U	0.0025 U	0.0025 U	0.0022 U	0.0034 U	0.0025 U	0.0026 U	0.0024 U
1,1,2-Trichloroethane	140	160	0.00099 U	0.00086 U	0.00077 U	0.00076 U	0.00088 U	0.0009 U	0.00079 U	0.0012 U	0.00089 U	0.00091 U	0.00085 U
Trichloroethene	1,300	1,500	0.00082 U	0.00071 U	0.00063 U	0.00062 U	0.00073 U	0.00074 U	0.00065 U	0.00098 U	0.00073 U	0.00075 U	0.0007 U
1,2,4-Trimethylbenzene	560	640	0.0013 U	0.0011 U	0.00097 U	0.00095 U	0.0011 U	0.0011 U	0.00099 U	0.0015 U	0.0011 U	0.0012 U	0.0011 U
1,3,5-Trimethylbenzene	480	550	0.0015 U	0.0013 U	0.0011 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.0018 U	0.0013 U	0.0013 U	0.0012 U
Vinyl chloride	110	580	0.00087 U	0.00076 U	0.00068 U	0.00066 U	0.00078 U	0.00079 U	0.00069 U	0.0011 U	0.00078 U	0.0008 U	0.00075 U
Xylene (Total)	8,000	9,100	0.0033 U	0.0029 U	0.0026 U	0.0025 U	0.0029 U	0.003 U	0.0026 U	0.004 U	0.0029 U	0.003 U	0.0028 U
m&p-Xylene	-	-	0.0021 U	0.0018 U	0.0016 U	0.0016 U	0.0019 U	0.0019 U	0.0017 U	0.0025 U	0.0019 U	0.0019 U	0.0018 U
o-Xylene	-	-	0.0012 U	0.0011 U	0.00095 U	0.00093 U	0.0011 U	0.0011 U	0.00097 U	0.0015 U	0.0011 U	0.0011 U	0.001 U
Total Metals (mg/kg) - EPA 3050													
Lead	1,000	190,000	32.5	19	15.6	15.2	26.9	25.3	36.6	14.2	19	11.8	22.5

Notes:
(a) PADEP Medium Specific Concentrations (MSCs), January 8, 2011.
(b) Bold, grey shaded values shall be used to determine compliance with Act 2.
(c) NA - Not applicable.
(d) ND - Not Detected
(e) U - Indicates the compound was analyzed for, but not detected
(f) J - Estiamted concentration above the adjusted method detection limit and below the adjusted rep
(g) **B** - The analyte was detected substantially above the level reported in laboratory or field blanks (I
"- CAS RN not included in ACT 2 Standards Table

TABLE 1
SUMMARY OF ANALYTICAL RESULTS COMPARED TO APPLICABLE ACT 2 STANDARDS
911th Airlift Wing T-Ramp - Soil Results
Coraopolis Township, Allegheny County, Pennsylvania



SAMPLE ID	Non-Residential Direct Contract MSC (0-2 feet) ^(a)	Non-Residential Direct Contract MSC (2-15 feet) ^(a)	TRAMP-K6-S-4-6	TRAMP-F11-S-0-2	TRAMP-H0-S-6-8	DUP 3 TRAMP-H0-S-6-8	TRAMP-C10-S-2-4	TRAMP-C3-S-2-4	TRAMP-A9-S-2-4	
SAMPLE DATE			4/12/2012	4/13/2012	4/16/2012		4/24/2012	4/25/2012	4/25/2012	
Volatile Organic Compounds (mg/kg) - EPA 8260										
Acetone	10,000	10,000	0.0078 B	0.0044 B	0.013 B	0.06 B	0.0015 B	0.0022 B	0.0033 B	ND
Benzene	290	330	0.0013 J	0.0031 J	0.00076 U	0.00077 U	0.0034 J	0.0064 U	0.0013 U	ND
Bromodichloromethane	60	69	0.0023 U	0.0016 U	0.0018 U	0.0018 U	0.0014 U	0.0021 U	0.0031 U	ND
Bromoform	2,000	2,300	0.0032 U	0.0022 U	0.0025 U	0.0025 U	0.002 U	0.0029 U	0.0043 U	ND
Bromomethane	400	460	0.0037 U	0.0026 U	0.0029 U	0.0029 U	0.0023 U	0.0033 U	0.005 U	ND
TOTAL BTEX			ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	2,000	2,300	0.0016 U	0.0011 U	0.0012 U	0.012 U	0.00099 U	0.0014 U	0.0021 U	ND
Carbon Disulfide	10,000	10,000	0.016 U	0.0057 U	0.00074 U	0.0023 J	0.0006 U	0.0018 J	0.38 U	ND
Carbon Tetrachloride	150	170	0.0011 U	0.00078 U	0.00086 U	0.00088 U	0.0007 U	0.001 U	0.0015 U	ND
Chlorobenzene	4,000	4,600	0.0012 U	0.00086 U	0.00096 U	0.00098 U	0.00078 U	0.0011 U	0.0017 U	ND
Chloroethane	10,000	10,000	0.002 U	0.0014 U	0.0016 U	0.0016 U	0.0013 U	0.013 U	0.0028 U	ND
Chloroform	97	110	0.00089 U	0.00062 U	0.00069 U	0.0007 U	0.00056 U	0.00081 U	0.0012 U	ND
Chloromethane	1,200	1,400	0.0013 U	0.00091 U	0.001 U	0.001 U	0.00083 U	0.0012 U	0.0018 U	ND
Dibromochloromethane	82	95	0.0019 U	0.0013 U	0.0015 U	0.0015 U	0.0012 U	0.0017 U	0.0026 U	ND
1,2-Dibromoethane (EDB)	3.7	4.3	0.0033 U	0.0023 U	0.0025 U	0.0026 U	0.0021 U	0.003 U	0.0044 U	ND
1,2-Dichlorobenzene	10,000	10,000	0.0014 U	0.00095 U	0.0011 U	0.0011 U	0.00086 U	0.0012 U	0.0019 U	ND
1,3-Dichlorobenzene	8,400	10,000	0.0016 U	0.0011 U	0.0012 U	0.0013 U	0.001 U	0.0014 U	0.0022 U	ND
1,4-Dichlorobenzene	200	230	0.0015 U	0.0011 U	0.0012 U	0.0012 U	0.00096 U	0.0014 U	0.0021 U	ND
1,1-Dichloroethane	1,400	1,600	0.00099 U	0.00069 U	0.00077 U	0.00078 U	0.00062 U	0.0009 U	0.0013 U	ND
1,2-Dichloroethane	86	98	0.0011 U	0.00079 U	0.00088 U	0.0009 U	0.00072 U	0.001 U	0.0015 U	ND
1,2-Dichloroethane (Total)			ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	10,000	10,000	0.001 U	0.00071 U	0.00079 U	0.0008 U	0.00064 U	0.00092 U	0.0014 U	ND
cis-1,2-Dichloroethene	10,000	10,000	0.0031 U	0.0021 U	0.0024 U	0.0024 U	0.0019 U	0.0028 U	0.0042 U	ND
trans-1,2-Dichloroethene	4,800	5,500	0.001 U	0.00071 U	0.00079 U	0.00081 U	0.00064 U	0.00093 U	0.0014 U	ND
1,2-Dichloropropane	220	260	0.002 U	0.0014 U	0.0016 U	0.0016 U	0.0013 U	0.0018 U	0.0027 U	ND
cis-1,3-Dichloropropene	-	-	0.002 U	0.0014 U	0.0015 U	0.0015 U	0.0012 U	0.0018 U	0.0027 U	ND
trans-1,3-Dichloropropene	-	-	0.002 U	0.0014 U	0.0016 U	0.0016 U	0.0013 U	0.0018 U	0.0028 U	ND
Ethylbenzene	10,000	10,000	0.0032 U	0.0022 U	0.0025 U	0.0025 U	0.002 U	0.0029 U	0.015 U	ND
2-Hexanone			ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	10,000	10,000	0.0013 U	0.00092 U	0.001 U	0.001 U	0.00083 U	0.0012 U	0.021 U	ND
Methylene Chloride	4,700	5,400	0.0017 U	0.0012 U	0.0013 U	0.0013 U	0.0011 U	0.0015 U	0.0023 U	ND
4-Methyl-2-pentanone (MIBK)	10,000	10,000	0.0013 U	0.0009 U	0.001 U	0.001 U	0.00081 U	0.0012 U	0.0017 U	ND
Methyl-tert-butyl ether	3,200	3,700	0.00089 U	0.00062 U	0.00069 U	0.0007 U	0.00056 U	0.00081 U	0.0012 U	ND
Naphthalene	56,000	190,000	0.0032 U	0.0022 U	0.0024 U	0.0025 U	0.002 U	0.0029 U	0.072 J	ND
Styrene	10,000	10,000	0.0014 U	0.00097 U	0.0011 U	0.0011 U	0.00087 U	0.0013 U	0.0019 U	ND
1,1,2,2-Tetrachloroethane	38	44	0.0011 U	0.00077 U	0.00086 U	0.00087 U	0.0007 U	0.001 U	0.0015 U	ND
Tetrachloroethene	1,500	4,400	0.00091 U	0.00063 U	0.0007 U	0.00072 U	0.00057 U	0.00082 U	0.0012 U	ND
Toluene	10,000	10,000	0.00081 U	0.0019 J	0.0012 J	0.00082 J	0.0011 J	0.0013 J	0.0011 U	ND
1,1,1-Trichloroethane	10,000	10,000	0.0033 U	0.0023 U	0.0025 U	0.0026 U	0.002 U	0.0029 U	0.0044 U	ND
1,1,2-Trichloroethane	140	160	0.0012 U	0.0008 U	0.00089 U	0.00091 U	0.00072 U	0.002 U	0.0016 U	ND
Trichloroethene	1,300	1,500	0.00095 U	0.00066 U	0.00073 U	0.00075 U	0.00059 U	0.00086 U	0.0013 U	ND
1,2,4-Trimethylbenzene	560	640	0.0015 U	0.001 U	0.0011 U	0.0011 U	0.00091 U	0.0013 U	0.28 U	ND
1,3,5-Trimethylbenzene	480	550	0.0017 U	0.0012 U	0.0013 U	0.0013 U	0.0011 U	0.0015 U	0.088 U	ND
Vinyl chloride	110	580	0.001 U	0.0007 U	0.00078 U	0.0008 U	0.00064 U	0.00092 U	0.0014 U	ND
Xylene (Total)	8,000	9,100	0.0038 U	0.0027 U	0.003 U	0.003 U	0.0024 U	0.0035 U	0.036 U	ND
m&p-Xylene	-	-	0.0024 U	0.0017 U	0.0019 U	0.0019 U	0.0015 U	0.0022 U	0.022 U	ND
o-Xylene	-	-	0.0014 U	0.00098 U	0.0011 U	0.0011 U	0.00089 U	0.0013 U	0.014 U	ND
Total Metals (mg/kg) - EPA 3050										
Lead	1,000	190,000	17.8 U	12.2 U	22.4 U	21.3 U	16.7 U	13.4 U	0.26 U	

Notes:
(a) PADEP Medium Specific Concentrations (MSCs), January 8, 2011.
(b) Bold, grey shaded values shall be used to determine compliance with Act 2.
(c) NA - Not applicable.
(d) ND - Not Detected
(e) U - Indicates the compound was analyzed for, but not detected
(f) J - Estiamted concentration above the adjusted method detection limit and below the adjusted rep
(g) **B** - The analyte was detected substantially above the level reported in laboratory or field blanks (I
"- " CAS RN not included in ACT 2 Standards Table

TABLE 1
SUMMARY OF ANALYTICAL RESULTS COMPARED TO APPLICABLE ACT 2 STANDARDS
911th Airlift Wing T-Ramp - Soil Results
Coraopolis Township, Allegheny County, Pennsylvania



SAMPLE ID	Nonuse Aquifers Non-Residential MSC ^(c)	TRAMP-F11-W	TRAMP-L2-W	DUPLICATE TRAMP-L2-W	FIELD BLANK	EQUIPMENT BLANK	TRIP BLANK	TRAMP-H0-W	TRAMP-I4-W	TRAMP-Trip	TRAMP-C10-W	TRAMP-D7-W	TRAMP-A9-W	TRAMP-C3-W	TRAMP-EB-0426
SAMPLE DATE		4/16/2012	4/19/2012	4/19/2012	4/19/2012	4/19/2012	4/16/2012	4/24/2012	4/24/2012	4/24/2012	4/25/2012	4/25/2012	4/26/2012	4/26/2012	4/26/2012
Volatile Organic Compounds (ug/L) - EPA 8260															
Acetone	920,000	2.6 U	3.1 B	2.6 U	4.3 B	6.4 J	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
Benzene	500	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
Bromochloromethane	90	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Bromodichloromethane	80	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Bromoform	8,000	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Bromomethane	1,000	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
2-Butanone (MEK)	400,000	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Carbon Disulfide	6,200	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Carbon Tetrachloride	50	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chlorobenzene	10,000	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Chloroethane	90,000	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Chloroform	800	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Chloromethane	3,000	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Dibromochloromethane	8,000	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichlorobenzene	60,000	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,3-Dichlorobenzene	60,000	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,4-Dichlorobenzene	7,500	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,1-Dichloroethane	1,600	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,2-Dichloroethane	50	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2-Dichloroethene (Total)	-	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,1-Dichloroethene	70	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	1,000	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,2-Dichloropropane	50	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
cis-1,3-Dichloropropene	-	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
trans-1,3-Dichloropropene	-	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Ethylbenzene	70,000	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
2-Hexanone	-	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Isopropylbenzene (Cumene)	50,000	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methylene Chloride	500	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	1	0.23 U	0.23 U	1.3	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
4-Methyl-2-pentanone (MIBK)	820,000	0.29 U	4.6 J	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Methyl-tert-butyl ether	200	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Naphthalene	30,000	0.33 U	1.9 J	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Styrene	10,000	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2,2-Tetrachloroethane	430	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Tetrachloroethene	50	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Toluene	100,000	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
1,2,4-Trichlorobenzene	44,000	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
1,1,1-Trichloroethane	2,000	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	50	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Trichloroethene	50	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-Trimethylbenzene	6,200	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,3,5-Trimethylbenzene	53	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Vinyl chloride	20	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Xylene (Total)	180,000	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
m&p-Xylene	-	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
o-Xylene	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Volatile Organic Compounds (ug/L) - EPA 8011															
1,2-Dibromoethane (EDB)	5	0.0079 U	0.0079 U	0.0079 U	0.0079 U	0.0079 U	-	0.0079 U	0.0079 U	-	0.0079 U	0.0079 U	0.0079 U	0.0079 U	0.0079 U
Dissolved Metals (ug/L) - EPA 200.7															
Lead	5,000	4.9 B	2.3 B	2.1 B	2.9 B	2.5 B	-	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:
(a) PADEP Medium Specific Concentrations (MSCs), January 8, 2011.
(b) Bold, grey shaded values shall be used to determine compliance with Act 2.
(c) NA - Not applicable.
(d) ND - Not Detected
(e) U - Indicates the compound was analyzed for, but not detected
(f) J - Estiamted concentration above the adjusted method detection limit and below the adjusted reporting limit.
(g) B - The analyte was detected substantially above the level reported in laboratory or field blanks (EPA Region III).
"-." CAS RN not included in ACT 2 Standards Tabl

TABLE 2
SUMMARY OF SOIL BORINGS AND TEMPORARY WELL DATA
911th Airlift Wing T-Ramp
Coraopolis Township, Allegheny County, Pennsylvania



BORING ID	Northing	Easting	Elevation	DATE DRILLED	TOTAL DEPTH (FT)	REFUSAL DEPTH (FT)	DEPTH TO WATER (FT)			HIGHEST PID READING (PPM)	INTERVAL? (FT BGS)	ODOR?	INTERVAL? (FT BGS)	SOIL SAMPLE	PID READING OF SAMPLE COLLECTED (PPM)	WELL INSTALLED?	SCREEN LENGTH	TOP OF CASING (FT)	APPROX WELL VOLUME (GAL)	PURGE VOLUME DURING SAMPLING (GAL)	WATER SAMPLE	BACKFILL MATERIAL	NOTES
							ATD	0-HR	24-HR														
A-5	433211.71	1282939	1146.618	4/5/2012	10.3	10.3	10.0	-	-	3.2	2 to 4	-	-	TRAMP-A5-S-2-4	3.2	No	-	-	-	-	-	Grout & Concrete	
A-7	433007.69	1282955	1147.043	4/5/2012	14.3	14.3	-	-	-	3.7	12 to 14	-	-	TRAMP-A7-S-2-4		No	-	-	-	-	-	Grout & Concrete	Unable to collect soil sample from 12' to 14' due to rock fragments
A-8	432909.41	1282958	1146.321	4/5/2012	12.3	12.3	-	-	-	159.1	4 to 6	Yes	4 to 6	TRAMP-A8-S-4-6	159.1	No	-	-	-	-	-	Grout & Concrete	Petroleum staining noted 4' to 6'
A-9	432791.36	1282965	1147.605	4/25/2012	78.0	4.1	30.0	-	30.0	133.8	2 to 4	Yes	1.3 to 4	TRAMP-A9-S-2-4	133.8	Yes	50.0	2.54	8.48	2.58	TRAMP-A9-W	Grout & Concrete	Possible petroleum staining 1.3' to 4'
A-10	432696.68	1282964	1149.366	4/10/2012	8.3	8.3	-	-	-	1.2	6 to 8	-	-	TRAMP-A10-S-2-4		No	-	-	-	-	-	Grout & Concrete	Unable to collect soil sample from 6' to 8' due to gravel
A-11	432593.32	1282968	1150.01	4/11/2012	4.3	4.3	-	-	-	0.4	4 to 6	-	-	TRAMP-A11-S-2-4	0.4	No	-	-	-	-	-	Grout & Concrete	Soil sample name, "TRAMP-A-11-S-2-4" was written incorrectly on chain of custody and in turn on the lab report. The TerraCore soil sample was obtained from the 4.0'-6.0' interval.
A-14	432288.41	1283007	1147.299	4/10/2012	8.3	8.3	-	-	-	0.3	2 to 4	-	-	TRAMP-A14-S-2-4	0.3	No	-	-	-	-	-	Soil cuttings & bentonite chips	
B-13	432423.78	1283068	1148.697	4/10/2012	8.0	8.0	-	-	-	0.5	2 to 4	-	-	TRAMP-B13-S-2-4	0.5	No	-	-	-	-	-	Grout & Concrete	
C-3	433455.08	1283166	1147.179	4/25/2012	68.0	4.1	53.0	-	55.8	0.2	2 to 4	-	-	TRAMP-C3-S-2-4	0.2	Yes	40.0	2.45	4.03	3.14	TRAMP-C3-W	Grout & Concrete	Equipment blank water sample collected
C-4	433349.4	1283164	1148.417	4/4/2012	12.3	12.3	6.4	-	-	3.4	4 to 6	-	-	TRAMP-C4-S-4-6	3.4	No	-	-	-	-	-	Grout & Concrete	At 12', groundwater overflowed and had a sheen, likely oil; DUP-1 soil sample collected
C-10	432701.2	1283152	1150.703	4/24/2012	30.0	7.5	6.0		4.8	0.5	2 to 4	-	-	TRAMP-C10-S-2-4	0.5	Yes	25.0	2.43	4.12	2.10	TRAMP-C10-W	Grout & Concrete	
D-3	433416.6	1283240	1147.569	4/4/2012	12.3	12.3	11.7	-	-	3.4	4 to 6	-	-	TRAMP-D3-S-4-6	3.4	No	-	-	-	-	-	Grout & Concrete	
D-7	432998.91	1283241	1149.141	4/23/2012	58.0	4.1	54.6	38.0	41.3	0.3	2 to 4	-	-	-	-	Yes	40.0	2.41	2.73	1.57	TRAMP-D7-W	Grout & Concrete	Unable to collect soil sample due to rock fragments and low recovery
D-12	432512.07	1283244	1149.08	4/9/2012	8.2	8.2	-	-	-	1.6	4 to 6	-	-	TRAMP-D12-S-4-6	1.6	No	-	-	-	-	-	Grout & Concrete	
E-9	432816.46	1283349	1150.523	4/9/2012	11.0	11.0	-	-	-	0.9	4 to 6	-	-	TRAMP-E9-S-2-4	0.2	No	-	-	-	-	-	Grout & Concrete	Unable to collect soil sample from 4' to 6' due to rock fragments
F-1	433622.48	1283446	1148.409	4/2/2012	12.5	12.5	-	-	-	203.8	12 to 14	Yes	4 to 6 12 to 12.4	TRAMP-F1-S-2-4	2.6	No	-	-	-	-	-	Soil cuttings & bentonite chips	Unable to collect soil sample from 12' to 14' due to rock fragments; organic odor 4' to 6' and 12' to 14'
F-5	433193.33	1283434	1150.939	4/6/2012	24.5	24.5	-	-	-	4.4	6 to 8	-	-	TRAMP-F5-S-6-8	4.4	No	-	-	-	-	-	Grout & Concrete	
F-11	432616.01	1283405	1147.924	4/13/2012	58.0	4.0	48.0	-	40.0	0.5	0 to 2	-	-	TRAMP-F11-S-0-2	0.5	Yes	25.0	2.40	2.94	2.30	TRAMP-F11-W	Soil cuttings & bentonite chips	
G-3	433410.45	1283527	1148.282	4/3/2012	24.3	24.3	-	-	-	5.9	10 to 12	-	-	TRMAP-G3-S-10-12	5.9	No	-	-	-	-	-	Grout & Concrete	
H-0	433704.36	1283619	1148.008	4/16/2012	73.0	19.2	57.0	-	59.4	2.7	6 to 8	-	-	TRAMP-H0-S-6-8	2.7	Yes	35.0	2.58	2.25	1.45	TRAMP-H0-W	Grout & Concrete	DUP-3 soil sample collected
H-6	433104.73	1283631	1150.742	4/6/2012	26.0	-	-	-	-	2.8	14 to 16	-	-	TRAMP-H6-S-14-16	2.8	No	-	-	-	-	-	Grout & Concrete	End of boring at 26.0' per termination criteria
H-8	432949.9	1283637	1149.647	4/9/2012	25.0	-	-	-	-	1.2	15 to 17	-	-	TRAMP-H8-S-15-17	1.2	No	-	-	-	-	-	Soil cuttings & bentonite chips	End of boring at 25.0' per termination criteria
I-4	433308.5	1283724	1148.997	4/19/2012	83.0	19.0	-	-	53.4	2.4	2 to 4	-	-	TRAMP-I4-S-2-4	2.4	Yes	50.0	2.50	4.80	1.03	TRAMP-I4-W	Grout & Concrete	MS/MSD soil samples collected
J-1	433629.6	1283810	1146.124	4/2/2012	22.0	22.0	-	-	-	10.1	2 to 4	-	-	TRAMP-J1-S-2-4	10.1	No	-	-	-	-	-	Soil cuttings & bentonite chips	
K-6	433051.09	1283851	1149.024	4/12/2012	23.5	23.5	-	-	-	2.0	4 to 6	-	-	TRAMP-K6-S-4-6	2.0	No	-	-	-	-	-	Soil cuttings & bentonite chips	Temporary well was orginally scoped to be installed; unable to advance boring, drilling rod coupler sheared.
L-2	433553.01	1284019	1144.146	4/11/2012	43.0	23.0	4.0	24.3	28.2	0.7	6 to 8	Yes	3.6 to 7.5	TRAMP-L2-S-6-8	0.7	Yes	35.0	2.60	2.42	2.01	TRAMP-L2-W	Grout & Concrete	Duplicate water sample collected; DUP-2 soil sample collected; field and equipment blank water samples collected.
L-4	433335.38	1283990	1147.016	4/3/2012	25.0	-	-	-	-	5.8	22 to 24	-	-	TRAMP-L4-S-22-24	5.8	No	-	-	-	-	-	Grout & Concrete	End of boring at 25.0' per termination criteria

NOTES:
1) Soil: 3 duplicates (borings C-4, L-2, H-0), 1 MS/MSD (boring I-4)
2) Water: 1 duplicate (boring L-2), 1 field blank (boring L-2), 2 equipment blanks (borings C-3, L-2), and 1 MS/MSD (not collected)

FIGURES

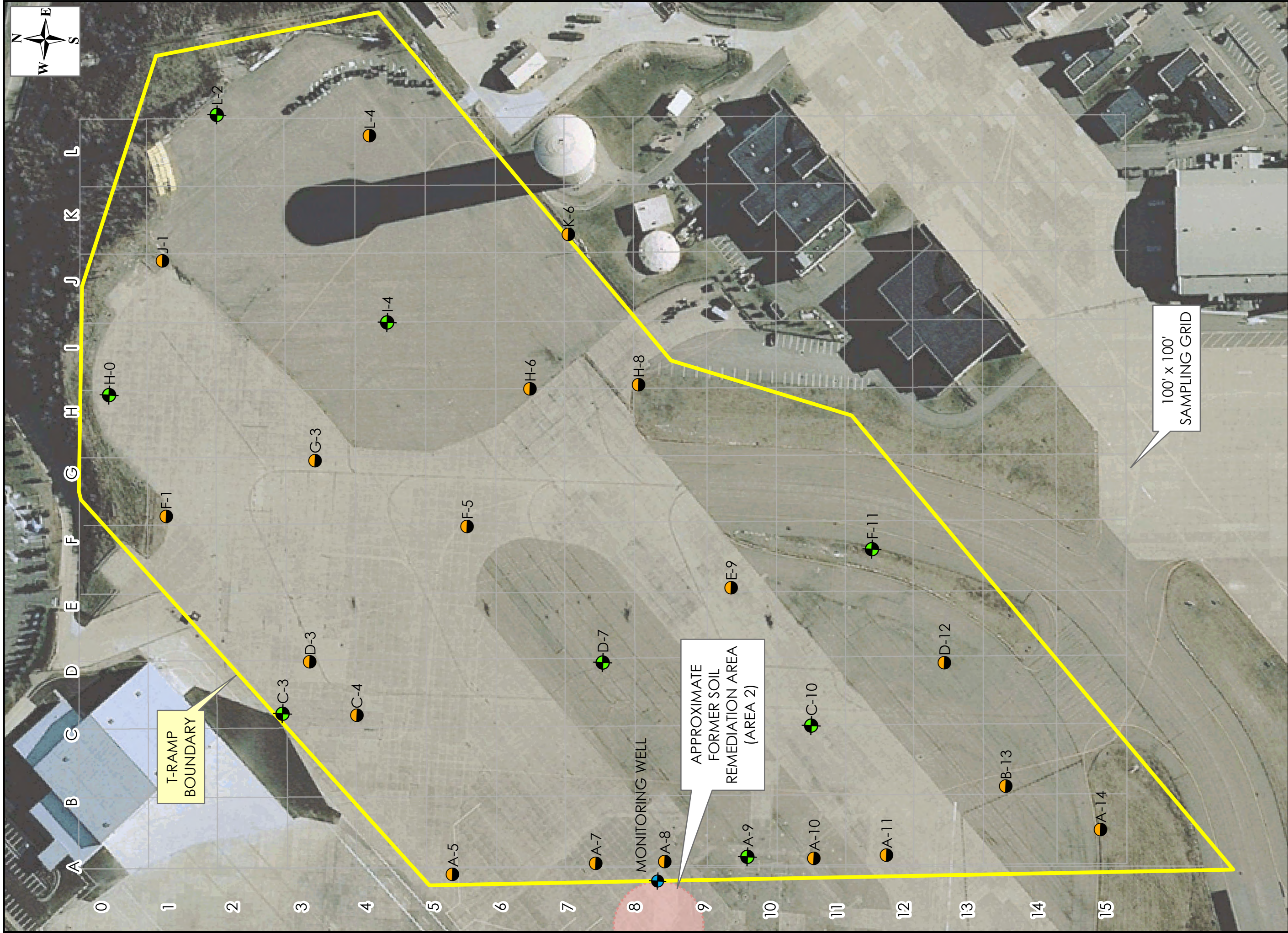


FIGURE NO. 1



Site Location Map				
T-Ramp EBS for 911th Airlift Wing				
Pittsburgh IAP Air Reserve Station				
Drawn By	Checked By	Date	Project	Sheet No.
ZDW	JTM	5/7/12	546	1





Legend

- Temporary Monitoring Well Location
- Soil Boring Location
- Existing Monitoring Well
- T-Ramp Area
- Former Soil Remediation Area
- 100' x 100' grid

FIGURE NO. 2

Sample Location Map				
T-Ramp EBS				
911th Airlift Wing				
Pittsburgh IAP Air Reserve Station				
Drawn By	Checked By	Date	Project	Sheet No.
ZDW	JTM	7/12/12	546	2

ATTACHMENT A
DOCUMENTS REVIEWED

DOCUMENTS REVIEWED

1. “Environmental Baseline Survey Report for additional acreage from Allegheny County”, 911 AW/CE, Pittsburgh International Airport ARS, 5 July 1996.
2. “Cleanup Plan, Pittsburgh International Airport, Old Terminal, Fuel Distribution System”, Prepared for the Allegheny County Department of Aviation by CDM, January 1997.
3. “Final Report (including Appendices A through G), Pittsburgh International Airport, Old Terminal, Fuel Farm Area”, Prepared for the Allegheny County Airport Authority by CDM, August 2003.
4. “Final Report - Statewide Health Standard Checklist and Final Report Summary, Pittsburgh International Airport, Old Terminal, Fuel Farm Area”, Prepared for the Allegheny County Airport Authority by CDM, August 2003.
5. “Final Report, Pittsburgh International Airport, Old Terminal, Fuel Distribution Area”, Prepared for the Allegheny County Airport Authority by CDM, September 2003.
6. “Final Report Addendum, Pittsburgh International Airport, Old Terminal, Fuel Distribution Area”, Prepared for the Allegheny County Airport Authority by CDM, January 2004.
7. “Final Report - Statewide Health Standard Checklist and Final Report Summary, Pittsburgh International Airport, Old Terminal, Fuel Distribution Area”, Prepared for the Allegheny County Airport Authority by CDM, September 2003.
8. “Noise Exposure Maps Update”, Pittsburgh International Airport, Summer 2006.
9. “Noise Assessment, United States Air Force Lockheed C-130, North Operations Tactical Patterns, Pittsburgh International Airport, Pittsburgh, Pennsylvania”, Prepared for the Allegheny County Airport Authority by Michael Baker, Inc., September 2007.

10. "Non-Use Aquifer Determination, Pittsburgh International Airport, Old Terminal, Fuel Distribution System and Fuel Farm Areas", Prepared for the Allegheny County Department of Aviation by CDM, November 1999.
11. "Fuel Hydrant System Site Investigation Report, Pittsburgh International Airport, Old Terminal", Prepared for the Allegheny County Department of Aviation by CDM, June 30, 1993.
12. "Specifications for the Decommissioning of the Fuel Farm System and Auxiliaries and Remediation of the Soil at the Old Greater Pittsburgh International Airport, Fuel Distribution System Soil Remediation", Prepared for the Allegheny County Department of Aviation by CDM, April 1997.
13. "Site Characterization and Remedial Action Report for the Jet Fuel Storage Area", Prepared for the Allegheny County Department of Aviation by BAKER/TSA, Inc., December 1990.
14. "Hydrogeological Study, Pittsburgh International Airport, Old Terminal, Fuel Distribution System", Prepared for the Allegheny County Department of Aviation by CDM, June 1996.
15. "Remedial Action Plan, Pittsburgh International Airport, Old Terminal, Fuel Farm Area", Prepared for the Allegheny County Department of Aviation by CDM, August 1998.
16. "Jet Fuel Distribution System Site Investigation Work Plan, Phase IB – West Dock, Pittsburgh International Airport, Old Terminal", Prepared for the Allegheny County Department of Aviation by CDM, August 1994.
17. "Phase IB Investigation Summary Report, East, South, Southeast and West Docks, Pittsburgh International Airport, Old Terminal", Prepared for the Allegheny County Department of Aviation by CDM, November 1995.
18. "Site Characterization Report, Pittsburgh International Airport, Old Terminal, Fuel Farm Area", Prepared for the Allegheny County Department of Aviation by CDM, March 1997.

19. "Site Characterization Report – Appendix M, Pittsburgh International Airport, Old Terminal, Fuel Farm Area", Prepared for the Allegheny County Department of Aviation by CDM, April 1997.
20. "Remedial Investigation/Feasibility Study, Former Drum Storage Area at Building 408, Draft Work Plan", Prepared for Pittsburgh International Airport Air Reserve Station by Montgomery Watson, March 1997.
21. "Former Drum Storage Area at Building 408, Final Monitoring Well Abandonment Report", Prepared for Pittsburgh Air Reserve Station by Montgomery Watson Harza, June 2002.
22. "Site Soil Assessment Summary Report, Former POL Area", Prepared for Pittsburgh International Airport Air Reserve Station by Montgomery Watson, May 1998.
23. "Well Abandonment Report, Pittsburgh International Airport Air Reserve Station", Prepared for Air Force Reserve Command by Tetra Tech EM, Inc., February 2001.
24. "Final Remedial Action Plan, Site ST-06 POL Area", Prepared for Pittsburgh Air Reserve Station by Montgomery Watson, August 1998.
25. "Soil Borings/Monitoring Well Report, POL Site Remedial Investigation, Project GP 92-008", Prepared for U.S. Air Force 911th Airlift Group by L. Robert Kimball & Associates, November 1993.
26. "Facility ID No. 02-81147, Old POL Site, Tank Closure Documentation", Prepared for 911th Airlift Wing by Neumeyer Environmental Services, Inc.
27. "Final Environmental Assessment Technical Report for Action to the Old Terminal Building and Development of the Airside Business Park with Final DOT 4(f) Evaluation Appended", Michael Baker Jr. Inc., January 1999.
28. "General Plan – Pittsburgh IAP Air Reserve Station", US Air Force 911th Air Lift Wing, December 1998.
29. "Acceptance Letter – Final Report Under the Statewide Health Standards, Former Drum Storage Area at Building 408 (SS-01)", Pennsylvania Department of Environmental Protection, October 1999.

30. "Environmental Investigation Report, Proposed Jet Fuel Facility Site", Prepared for United States Army Corps of Engineers Baltimore District by Burns & McDonnell, March 1994.
31. "Installation Restoration Program, Phase I Record Search", Prepared for United States Air Force Reserve by Roy F. Weston, Inc., December 1984.
32. "Site Characterization Report, 911th Airlift Wing/CE, Building 322, Pittsburgh International Airport ARS", Prepared for 911th Airlift Wing/CE by Environmental & Geological Consultants, Inc., April 1996.
33. "Former Civil Engineering Rubble Landfill (LF-03), Decision Document", Prepared for Pittsburgh Air Reserve Station by Montgomery Watson, November 1998.
34. "Site ST-06 Former POL Area, Remedial Action Completion Report", Prepared for Pittsburgh International Airport Air Reserve Station by Montgomery Watson Harz, February 2002.
35. "Former Drum Storage Area at Building 408 (SS-01), Final Report Under the Statewide Health Standard", Prepared for Pittsburgh International Airport Air Reserve Station by Montgomery Watson, May 1998.
36. "The EDR Radius Map™ Report with GeoCheck®" for the Pittsburgh IAP – 911th Airlift Wing T-RAMP property, Environmental Data Resources Inc., November 14, 2011.
37. "The EDR Aerial Photo Decade Package" for the Pittsburgh IAP – 911th Airlift Wing T-RAMP property, Environmental Data Resources Inc., November 15, 2011.
38. "EDR Building Permit Report" for the Pittsburgh IAP – 911th Airlift Wing T-RAMP property, Environmental Data Resources Inc., November 14, 2011.
39. "Certified Sanborn Map Report" for the Pittsburgh IAP – 911th Airlift Wing T-RAMP property, Environmental Data Resources Inc., November 14, 2011.

40. "EDR Historical Topographic Map Report" for the Pittsburgh IAP – 911th Airlift Wing T-RAMP property, Environmental Data Resources Inc., November 14, 2011.
41. "Vapor Encroachment Screen" for the Pittsburgh IAP – 911th Airlift Wing T-RAMP property, Environmental Data Resources Inc., November 17, 2011.
42. "Memorandum of Agreement Between Allegheny County and the United States Air Force Reserve", February 3, 1993.
43. "Guidance for Performing Site Inspections under CERCLA", Interim Final, USEPA/540-R-92-021, PB92-963375, September 1992.

ATTACHMENT B
SUBSURFACE EXPLORATION BORING LOGS



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433211.7 EASTING 1282939

BORING NO. A-5
SHEET 1 OF 1
DATE: START 4/5/12
O.G. END 4/5/12
ELEV. 1146.6 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 10.0 ft. TIME: 1035 DATE: 04/05/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
1.3	RC-1			-			D		0.0' to 1.3' Concrete	
2.0	AU			-	-	cl	D		1.3' to 2.2' Silty Clay with gravel (cl), gray, dry, hard, (FILL)	PID = 3.2 PPM SS-1, 9:55am TerraCore soil sample collected from SS-1
3.8	SS-1	29		-	-		D		2.2' to 10.3' SHALE, light gray to, completely weathered to highly weathered, thinly bedded	
4.0	AU	32		-	-		D			
4.4	SS-2	41	50/0.3	-	-		D			PID = 1.7 PPM SS-2
6.0	AU			-	-		D			
6.3	SS-3		50/0.3	-	-		D			PID = 2 PPM SS-3 Hard zone 6.0'-6.5'
8.0	AU			-	-		D			
8.3	SS-4		50/0.3	-	-		D			PID = 2.3 PPM SS-4
10.0	AU			-	-		D			
10.3	SS-5		50/0.3	-	-		W		End of Boring @ 10.3 ft.	PID = 2.7 PPM SS-5

NOTES: Boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433007.69 EASTING 1282955

BORING NO. A-7
SHEET 1 OF 1
DATE: START 4/5/12
O.G. END 4/5/12
ELEV. 1147.0 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
1.1	RC-1			-			D		0.0' to 1.1' Concrete, no odor	
2.0	AU			-	-	cl	D		1.1' to 2.5' Silty Clay with gravel (cl), orangeish gray, dry, hard, no odor, (FILL)	PID = 2.9 PPM SS-1, 11:40am TerraCore soil sample collected from SS-1
3.6	SS-1	10		-	-		D		2.5' to 14.3' SHALE, light gray to, completely weathered to highly weathered, thinly bedded	
4.0	AU	46		-	-		D			
4.3	SS-2	48		-	-		D			PID = 3.1 PPM SS-2
6.0	AU	50/0.1		-	-		D			
6.3	SS-3	50/0.3		-	-		D			PID = 3 PPM SS-3
8.0	AU			-	-		D			
8.3	SS-4	50/0.3		-	-		D			PID = 3.1 PPM SS-4
10.0	AU			-	-		D			
10.3	SS-5	50/0.3		-	-		D			PID = 2.9 PPM SS-5
12.0	AU			-	-		D			
12.3	SS-6	50/0.3		-	-		D			PID = 3.7 PPM SS-6
14.0	AU			-	-		D			
14.3	SS-7	50/0.3		-	-		D			PID = 3.7 PPM SS-6
									End of Boring @ 14.3 ft.	SS-7, No PID reading - 0% recovery

NOTES: Boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. A-8
SHEET 1 OF 1
DATE: START 4/5/12
O.G. END 4/5/12
ELEV. 1146.3 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 432909.41 EASTING 1282958

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
1.1	RC-1			-				D		0.0' to 1.1' Concrete	
2.0	AU			-	-	cl		D		1.1' to 2.8' Silty Clay with gravel (cl), gray and brown, dry, very stiff, (FILL)	PID = 4 PPM SS-1
4.0	SS-1	6 14 21 11		-	-			D		2.8' to 4.5' SHALE, gray to light, completely weathered, thinly bedded	PID = 159.1 PPM SS-2, 1:35pm TerraCore soil sample collected from SS-2
6.0	SS-2	2 9 9 6		-	-	gp		D		4.5' to 5.0' Gravel (gp), black, dry, medium dense, hydrocarbon odor	Odor and petroleum staining noted in sample SS-2
6.3	SS-3	50/0.3		-	-			D		5.0' to 12.3' SANDY SHALE, gray to dark, completely weathered, very thinly bedded	PID = 30.1 PPM SS-3
8.0	AU			-	-			D			PID = 5.5 PPM SS-4
8.3	SS-4	50/0.3		-	-			W			
10.0	AU			-	-			W			PID = 34 PPM SS-5
10.3	SS-5	50/0.3		-	-			W			
12.0	AU			-	-			W			PID = 15.9 PPM SS-6
12.3	SS-6	50/0.3		-	-			W			
										End of Boring @ 12.3 ft.	

NOTES: Boring backfilled with bentonite grout and topped with cement.
While grouting, void encountered.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. A-9
SHEET 1 OF 4
DATE: START 4/25/12
O.G. END 4/25/12
ELEV. 1147.6 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 432791.36 EASTING 1282965

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
									0.0' to 1.3' Asphalt	
2.0	AU			-	-	gp	D			
2.6	SS-1	40 50/0.1		-	-		M		1.3' to 4.0' Gravel and sand (gp), dark gray, coarse, moist, very dense, hydrocarbon odor, (FILL)	Strong odor and possible petroleum staining in sample SS-1 PID = 133.8 PPM SS-1, 1:15pm TerraCore soil sample collected from SS-1 PID = 124.7 PPM SS-2, 1:25pm
4.0	AU			-	-		M			
4.1	SS-2	50/0.1		-	-		W		4.0' to 4.1' SHALE, dark gray, highly weathered, thinly bedded	
78.0				-	-					

NOTES: Auger refusal encountered at 4.1'. Driller advanced tri-cone bit with air compression to a total depth of 78' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. A-9
SHEET 2 OF 4
DATE: START 4/25/12
O.G. END 4/25/12
ELEV. 1147.6 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 432791.36 EASTING 1282965

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
78.0				-	-							

NOTES: Auger refusal encountered at 4.1'. Driller advanced tri-cone bit with air compression to a total depth of 78' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. A-9
SHEET 3 OF 4
DATE: START 4/25/12
O.G. END 4/25/12
ELEV. 1147.6 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 432791.36 EASTING 1282965

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
78.0				-	-							

NOTES: Auger refusal encountered at 4.1'. Driller advanced tri-cone bit with air compression to a total depth of 78' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. A-9
SHEET 4 OF 4
DATE: START 4/25/12
O.G. END 4/25/12
ELEV. 1147.6 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 432791.36 EASTING 1282965

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
78.0				-	-							
											End of Boring @ 78.0 ft.	

NOTES: Auger refusal encountered at 4.1'. Driller advanced tri-cone bit with air compression to a total depth of 78' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. **A-10**
SHEET **1** OF **1**
DATE: START **4/10/12**
O.G. END **4/10/12**
ELEV. **1149.4 ft.**

PROJECT NAME **911th Airlift Wing T-Ramp** COUNTY **Allegheny**
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING **432696.68** EASTING **1282964**

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY **Joe Beck/Geo-Environmental Drilling**

EQUIPMENT USED **CME 45 truck rig with an automatic hammer**

DRILLING METHODS **3-1/4" HSA with split inner barrel**

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: **E. DeLattre** ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
2.0	AU			-	-			D		0.0' to 3.5' Asphalt, no odor	
		21									PID = 0.4 PPM
		45									SS-1, 10:42am
		23									TerraCore soil sample
4.0	SS-1	13		-	-	cl		D		1145.9	collected from SS-1*
4.3	SS-2	50/0.3		-	-	gp		D		1145.4	PID = 1.6 PPM
										4.0' to 6.0' Gravel with medium to coarse sand (gp), gray, medium to coarse, dry, very dense, no odor, poorly graded, (FILL)	SS-2, 10:50am
6.0	AU			-	-			D		1143.4	
6.3	SS-3	50/0.3		-	-			D		6.0' to 8.3' SHALE, gray, highly weathered, very thinly bedded	PID = 1.2 PPM
											SS-3, 11:03am
8.0	AU			-	-			D			
8.3	SS-4	50/0.3		-	-			D		1141.1	PID = 0.2 PPM
										End of Boring @ 8.3 ft.	SS-4, 11:08am

NOTES: Boring backfilled with bentonite grout and topped with cement.

*Sample SS-1 was the only interval a TerraCore sample could be obtained; sample SS-2 was mainly comprised of gravel.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. A-11
SHEET 1 OF 1
DATE: START 4/11/12
O.G. END 4/11/12
ELEV. 1150.0 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 432593.32 EASTING 1282968

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
1.3	RC-1			-			D		0.0' to 1.3' Concrete, no odor	
2.0	AU			-	-		D		1.3' to 4.3' SHALE, gray, completely weathered to highly weathered, very thinly to thinly bedded	SS-1, No PID reading - 0% recovery
2.7	SS-1	43		-	-		D			
3.0	AU	50/0.2		-	-		D			
4.3	SS-2	50/0.3		-	-		D		End of Boring @ 4.3 ft.	Auger cuttings appeared to be gray shale fragments PID = 0.4 PPM SS-2, 10:13am TerraCore soil sample collected from SS-2 Augers screeching when attempting to advance to 6.0'; auger refusal at 4.3'

NOTES: Boring backfilled with bentonite grout and topped with cement. *TerraCore soil sample was inaccurately named TRAMP-A11-S-2-4 on the chain of custody and in turn, the lab report. The TerraCore soil sample was collected from the interval 4.0'-6.0'.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. **A-14**
SHEET **1** OF **1**
DATE: START **4/10/12**
O.G. END **4/10/12**
ELEV. **1147.3 ft.**

PROJECT NAME **911th Airlift Wing T-Ramp** COUNTY **Allegheny**
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING **432288.41** EASTING **1283007**

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY **Joe Beck/Geo-Environmental Drilling**

EQUIPMENT USED **CME 45 truck rig with an automatic hammer**

DRILLING METHODS **3-1/4" HSA with split inner barrel**

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: **E. DeLattre** ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
		1								0.0' to 0.6', (TOPSOIL)	PID = 0.1 PPM
		3									SS-1, 11:40am
		6									
2.0	SS-1	8		-	-	cl		D		0.6' to 3.4' Silty Clay with rock fragments (cl), brown to light grayish brown, dry, stiff to hard, no odor, (FILL)	
		27									
		25		-	-			D			PID = 0.3 PPM
3.2	SS-2	50/0.2						D			SS-2, 11:52am
											TerraCore soil sample collected from SS-2
4.0	AU			-	-			D		3.4' to 8.3' SHALE, gray, highly weathered to moderately weathered, very thinly bedded	
4.3	SS-3	50/0.3		-	-			D			PID = 0.2 PPM
											SS-3, 11:58am
6.0	AU			-	-			D			
6.3	SS-4	50/0.3		-	-			D			PID = 0 PPM
											SS-4, 12:05pm
8.0	AU			-	-			D			
8.3	SS-5	50/0.3		-	-			D			
										End of Boring @ 8.3 ft.	SS-5, No PID reading - 0% recovery

NOTES: Boring backfilled with auger cuttings.
Iron staining prevalent throughout entire length of boring.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. **B-13**
SHEET **1** OF **1**
DATE: START **4/10/12**
O.G. END **4/10/12**
ELEV. **1148.7 ft.**

PROJECT NAME **911th Airlift Wing T-Ramp** COUNTY **Allegheny**
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING **432423.78** EASTING **1283068**

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY **Joe Beck/Geo-Environmental Drilling**

EQUIPMENT USED **CME 45 truck rig with an automatic hammer**

DRILLING METHODS **3-1/4" HSA with split inner barrel**

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: **E. DeLattre** ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
2.0	AU			-	-			D		0.0' to 3.0' Asphalt	
3.7	SS-1	41		-	-	gp		D			
4.0	AU	41		-	-			D			
4.3	SS-2	13		-	-			D		3.0' to 6.0' Gravel with silty clay and rock fragments (gp), brown to gray, dry, no odor, poorly graded	PID = 0.5 PPM SS-1, 9:28am TerraCore soil sample collected from SS-1
		50/0.2		-	-			D			
		50/0.3		-	-			D			SS-2, No PID reading - 0% recovery
6.0	AU			-	-			D			
6.9	SS-3	47		-	-			D		6.0' to 8.0' SHALE, gray, completely weathered, very thinly intensely laminated	PID = 0.1 PPM SS-3, 9:50am
8.0	AU			-	-			D			
		50/0.4		-	-						
										End of Boring @ 8.0 ft.	Loud auger chatter and screeching approaching 8.0'; driving shoe split

NOTES: Boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. C-3
SHEET 1 OF 4
DATE: START 4/25/12
O.G. END 4/25/12
ELEV. 1147.2 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433455.08 EASTING 1283166

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 53.0 ft. TIME: 1040 DATE: 04/25/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
1.0	RC-1			-			D		0.0' to 1.0' Concrete, no odor	
2.0	AU			-		cl	D		1.0' to 2.3' Sandy Clay and gravel with rock fragments (cl), brown, moist, hard, no odor, (FILL)	
2.3	SS-1	50/0.3		-	-		M		2.3' to 4.1' SHALE, gray, highly weathered	PID = 0.2 PPM SS-1, 9:24am TerraCore soil sample collected from SS-1 Gray shale auger cuttings observed between SS-1 and SS-2 SS-2, No PID reading - 0% recovery
4.0	AU			-	-		M			
4.1	SS-2	50/0.1		-	-		M			
68.0				-	-					

NOTES: Auger refusal encountered at 4.1'. Driller advanced tri-cone bit with air compression to a total depth of 68' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. C-3
SHEET 2 OF 4
DATE: START 4/25/12
O.G. END 4/25/12
ELEV. 1147.2 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433455.08 EASTING 1283166

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 53.0 ft. TIME: 1040 DATE: 04/25/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
68.0				-	-				-			

NOTES: Auger refusal encountered at 4.1'. Driller advanced tri-cone bit with air compression to a total depth of 68' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. C-3
SHEET 3 OF 4
DATE: START 4/25/12
O.G. END 4/25/12
ELEV. 1147.2 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433455.08 EASTING 1283166

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 53.0 ft. TIME: 1040 DATE: 04/25/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
68.0				-	-							

NOTES: Auger refusal encountered at 4.1'. Driller advanced tri-cone bit with air compression to a total depth of 68' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.

ENGINEERS FIELD BORING LOG

ENGINEERS & CONSULTANTS, INC.
PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433455.08 EASTING 1283166

BORING NO. C-3
SHEET 4 OF 4
DATE: START 4/25/12
O.G. END 4/25/12
ELEV. 1147.2 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 53.0 ft. TIME: 1040 DATE: 04/25/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./ TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY(%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
68.0				-	-			-			
										End of Boring @ 68.0 ft.	

NOTES: Auger refusal encountered at 4.1'. Driller advanced tri-cone bit with air compression to a total depth of 68' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433349.4 EASTING 1283164

BORING NO. C-4
SHEET 1 OF 1
DATE: START 4/4/12
O.G. END 4/4/12
ELEV. 1148.4 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 6.4 ft. TIME: 1230 DATE: 04/04/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
										0.0' to 1.3' Concrete, no odor	
										1147.1	
2.0	RC-1			-				D		1.3' to 2.0' Fly Ash, no odor	
										1146.4	
		4				cl				2.0' to 2.4' Silty Clay with coarse gravel (cl), brown and gray, dry, hard, no odor, (FILL)	PID = 1.5 PPM SS-1, 12:12pm
3.8	SS-1	6		-	-			D		2.4' to 12.3' SHALE, light brown to dark grayish, completely weathered to highly weathered, very thinly bedded	
4.0	AU	43		-	-			D			PID = 3.4 PPM SS-2, 12:22pm TerraCore soil sample collected from SS-2
4.4	SS-2	50/0.4		-	-			D			
6.0	AU			-	-			D			
6.3	SS-3	50/0.3		-	-			M			PID = 1 PPM SS-3, 12:34pm
8.0	AU			-	-			M			
8.4	SS-4	50/0.4		-	-			M			PID = 3 PPM SS-4, 12:45pm
10.0	AU			-	-			M			
10.3	SS-5	50/0.3		-	-			W			PID = 3.2 PPM SS-5, 12:55pm At 12.0' groundwater overflowed onto the ground surface. It had sheen and the liquid separated from the water, possibly petroleum/oil.
12.0	AU			-	-			W			
12.3	SS-6	50/0.3		-	-			M		1136.1	PID = 6.6 PPM SS-6, 1:15pm
										End of Boring @ 12.3 ft.	

NOTES: Boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. **C-10**
SHEET **1** OF **2**
DATE: START **4/24/12**
O.G. END **4/24/12**
ELEV. **1150.7 ft.**

PROJECT NAME **911th Airlift Wing T-Ramp** COUNTY **Allegheny**
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING **432701.2** EASTING **1283152**

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY **Joe Beck/Geo-Environmental Drilling**

EQUIPMENT USED **CME 45 truck rig with a donut hammer**

DRILLING METHODS **4-1/4" HSA with split inner barrel and tri-cone air compression**

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: **6.0 ft.** TIME: **1130** DATE: **04/24/12**

CHECKED BY: **E. DeLattre** ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
0.9	RC-1			-			D		0.0' to 0.9' Concrete, dry, no odor 1149.8	
2.0	AU			-	-	cl	D		0.9' to 4.3' Silty Clay with gravel and rock fragments (cl), light brown and gray, dry to moist, very stiff, no odor, (FILL)	PID = 0.5 PPM SS-1, 11:15am TerraCore soil sample collected from SS-1 Iron staining throughout SS-1
4.0	SS-1	13 10 13 20		-	-		D - M		4.3' to 6.1' Gravel with sand and silt (gp), dark gray, coarse, wet, medium dense, no odor, poorly graded, (FILL) 1146.4	PID = 0.4 PPM SS-2, 11:22am
6.0	SS-2	6 12 13 17		-	-	gp	M - W		6.1' to 7.5' SHALE, dark gray, residual soil weathered to highly weathered, very thinly to thinly bedded 1144.6	PID = 0.5 PPM SS-3, 11:32am
6.9	SS-3	18 50/0.4		-	-		W			
7.5	AU			-	-		W			Loud auger chatter and screeching approaching 7.5'
30.0				-	-					

NOTES: Auger refusal encountered at 7.5'. Driller advanced tri-cone bit with air compression to a total depth of 30' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. C-10
SHEET 2 OF 2
DATE: START 4/24/12
O.G. END 4/24/12
ELEV. 1150.7 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 432701.2 EASTING 1283152

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 6.0 ft. TIME: 1130 DATE: 04/24/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
30.0				-	-							
											End of Boring @ 30.0 ft.	

NOTES: Auger refusal encountered at 7.5'. Driller advanced tri-cone bit with air compression to a total depth of 30' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. D-3
SHEET 1 OF 1
DATE: START 4/4/12
O.G. END 4/4/12
ELEV. 1147.6 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 433416.6 EASTING 1283240

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 11.7 ft. TIME: 1055 DATE: 04/04/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
									0.0' to 1.3' Concrete, dry, no odor	
2.0	RC-1			-		sc	D		1146.3	
2.8	SS-1	12 50/0.3		-	-		D		1.3' to 2.5' Clayey Sand with rock fragments (sc), brown, dry, dense, no odor, poorly graded, (FILL)	PID = 1.3 PPM SS-1, 9:59am Iron staining noted in sample SS-1
4.0	AU			-	-		D		2.5' to 12.3' SHALE, light gray to dark, completely weathered to moderately weathered, very thinly bedded	
4.6	SS-2	7 50/0.1		-	-		D			PID = 3.4 PPM SS-2, 10:10am TerraCore soil sample collected from SS-2
6.0	AU			-	-		D			
6.3	SS-3	50/0.3		-	-		D			PID = 1.2 PPM SS-3, 10:21am
8.0	AU			-	-		D			
8.3	SS-4	50/0.3		-	-		D			PID = 1.1 PPM SS-4, 10:38am
10.0	AU			-	-		D			
10.2	SS-5	50/0.2		-	-		M			PID = 1.2 PPM SS-5, 10:48am
12.0	AU			-	-		M			Auger chatter approaching 12.0'
12.3	SS-6	50/0.3		-	-		W		1135.3	PID = 2.4 PPM SS-6, 11:01am
									End of Boring @ 12.3 ft.	

NOTES: Boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. D-7
SHEET 1 OF 3
DATE: START 4/23/12
O.G. END 4/23/12
ELEV. 1149.1 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 432998.91 EASTING 1283241

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 38.0 ft. TIME: 1205 DATE: 04/23/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
									0.0' to 2.0' Asphalt	
2.0	AU			-	-		D			
2.3	SS-1	50/0.3		-	-	gp	D		2.0' to 4.0' Gravel some sand (gp), dark gray, dry, very dense, no odor, poorly graded, (FILL)	PID = 0.3 PPM SS-1*, 10:35am *Unable to collect TerraCore soil sample due to low recovery/gravel in sample.
4.0	AU			-	-		D		Top of Rock @ 4.1 ft.	
4.1	SS-2	50/0.1		-	-		D		4.0' to 4.1' SANDSTONE, light gray, highly weathered, thinly bedded	PID = 0.1 PPM SS-2, 10:48am *Unable to collect TerraCore soil sample due to low recovery/gravel in sample.
58.0				-	-		D - W			

NOTES: Auger refusal encountered at 4.1'. Driller advanced tri-cone bit with air comp. to 58' / installed a temporary well. Upon removal of the temp. well, boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO.	<u>D-7</u>
SHEET	<u>2</u> OF <u>3</u>
DATE: START	<u>4/23/12</u>
O.G. END	<u>4/23/12</u>
ELEV.	<u>1149.1 ft.</u>

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 432998.91 EASTING 1283241

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 38.0 ft. TIME: 1205 DATE: 04/23/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
58.0				-	-				D - W			

NOTES: Auger refusal encountered at 4.1'. Driller advanced tri-cone bit with air comp. to 58' / installed a temporary well. Upon removal of the temp. well, boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. D-7
SHEET 3 OF 3
DATE: START 4/23/12
O.G. END 4/23/12
ELEV. 1149.1 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 432998.91 EASTING 1283241

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 38.0 ft. TIME: 1205 DATE: 04/23/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
58.0				-	-				D - W		End of Boring @ 58.0 ft.	

NOTES: Auger refusal encountered at 4.1'. Driller advanced tri-cone bit with air comp. to 58' / installed a temporary well. Upon removal of the temp. well, boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. D-12
SHEET 1 OF 1
DATE: START 4/9/12
O.G. END 4/9/12
ELEV. 1149.1 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 432512.07 EASTING 1283244

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
2.0	AU	38		-	-		D		0.0' to 2.5' Asphalt, no odor	
		47				cl			1146.6	PID = 0 PPM
3.9	SS-1	18		-	-		D		2.5' to 3.8' Silty Clay with rock fragments (cl), gray, dry, hard, no odor, (FILL)	SS-1, 1:50pm
4.0	AU	50/0.4		-	-		D		1145.3	
6.0	SS-2	50		-	-		D		3.8' to 8.2' SHALE, light gray, completely weathered to highly weathered, very thinly intensely laminated	PID = 1.6 PPM
6.0	AU	50		-	-		D			SS-2, 1:58pm
8.0	SS-3			-	-		D			TerraCore soil sample collected from SS-2
8.0	AU			-	-		D			Loud auger chatter and screeching at 6.0'
8.2	SS-4	50/0.2		-	-		D		1140.9	SS-3, No PID reading - 0% recovery
				-	-		D		End of Boring @ 8.2 ft.	Loud auger chatter and screeching at 8.0'
										PID = 0.3 PPM
										SS-4, 2:13pm

NOTES: Boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 432816.46 EASTING 1283349

BORING NO. E-9
SHEET 1 OF 1
DATE: START 4/9/12
O.G. END 4/9/12
ELEV. 1150.5 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 7.5 ft. TIME: 1250 DATE: 04/09/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
1.3	RC-1			-			D		0.0' to 1.3' Concrete	
2.0	AU			-		cl	D		1.3' to 2.4' Silty Clay with gravel (cl), gray, dry to moist, hard, no odor	
2.4	SS-1	39		-		a-1-a	M			PID = 0.2 PPM SS-1, 12:30pm TerraCore soil sample collected from SS-1*
		50/0.0		-					2.4' to 11.0' SANDSTONE, light gray, completely weathered to highly weathered	
4.0	AU			-			M			
4.4	SS-2	50/0.4		-			D			PID = 0.9 PPM SS-2, 12:36pm
6.0	AU			-			D			
6.4	SS-3	50/0.4		-			M			PID = 0.6 PPM SS-3, 12:46pm Iron staining in sample SS-3
8.0	AU			-			M			
8.2	SS-4	50/0.2		-			W			Auger chatter approaching 8.0' PID = 0.5 PPM SS-5, 12:55pm
10.0	AU			-			W			
10.3	SS-5	50/0.3		-			D			PID = 0.3 PPM SS-6, 1:03pm
									1139.5	
									End of Boring @ 11.0 ft.	

NOTES: Boring backfilled with bentonite grout and topped with cement.

*Unable to obtain TerraCore soil sample from SS-2 due to rock fragments.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. F-1
SHEET 1 OF 1
DATE: START 4/2/12
O.G. END 4/2/12
ELEV. 1148.4 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 433622.48 EASTING 1283446

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
2.0	SS-1	3 9 11 19		-	-	ml	D		0.0' to 4.0' Clayey Silt with rock fragments (ml), grayish brown, dry, very stiff, no odor, (FILL)	PID = 1.6 PPM SS-1, 1:44pm
3.2	SS-2	6 24 50/0.2		-	-		D			PID = 2.6 PPM SS-2*, 1:53pm TerraCore soil sample collected from SS-2
4.0	AU			-	-		D			1144.4
6.0	SS-3	6 10 13 23		-	-		D		4.0' to 12.5' SHALE, pale gray, residual soil weathered to moderately weathered, very thinly bedded	PID = 87.9 PPM SS-3, 2:10pm Faint odor in SS-3
6.9	SS-4	37 50/0.4		-	-		D			SS-4, 2:23pm
8.0	AU			-	-		D			
8.7	SS-5	40 50/0.2		-	-		D			PID = 4.2 PPM SS-5, 2:36pm
10.0	AU			-	-		D			
10.7	SS-6	41 50/0.2		-	-		D			PID = 37.9 PPM SS-6, 2:56pm
12.0	AU			-	-		D			
12.4	SS-7	50/0.4		-	-		D			PID = 203.8 PPM SS-7, 3:02pm Strong odor in SS-7
									End of Boring @ 12.4 ft.	1135.9

NOTES: Boring backfilled with auger cuttings.

*Unable to collect TerraCore soil sample from SS-7 due to low recovery and rock fragments.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433193.33 EASTING 1283434

BORING NO. F-5
SHEET 1 OF 2
DATE: START 4/6/12
O.G. END 4/6/12
ELEV. 1150.9 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
										0.0' to 1.3' Concrete, dry, no odor	
										1149.6	
2.0	RC-1			-				D		1.3' to 2.0' Fly Ash, dry, no odor	
										1148.9	
		5				cl				2.0' to 3.7' Silty Clay with gravel (cl), brown, dry, stiff, no odor, (FILL)	PID = 1.6 PPM SS-1, 9:30am
		6									
		7									
4.0	SS-1	8		-	-			D		1147.2	
		4								3.7' to 4.4' SHALE, light gray, highly weathered, very thinly bedded	PID = 1.3 PPM SS-2, 9:42am
		7				cl				1146.5	
		9								4.4' to 6.1' Silty Clay with gravel (cl), gray, dry, stiff, no odor, (FILL)	
6.0	SS-2	25		-	-			D		1144.8	
		2				cl				6.1' to 9.2' Silty Clay (cl), grayish brown to brown, moist to wet, stiff, no odor, (FILL)	PID = 4.4 PPM SS-3, 9:51am TerraCore soil sample collected from SS-3
		4									
		5									
8.0	SS-3	6		-	-			D		1141.7	
		3									PID = 2.1 PPM SS-4, 9:58am
		4									
		4				cl				9.2' to 21.5' Silty Clay with rock fragments (cl), brown and gray, moist to dry, stiff, no odor, (FILL)	
10.0	SS-4	5		-	-			D			PID = 2.5 PPM SS-5, 10:06am Augers kicked out due to boulders; driller had difficulty straightening rods
		2									
		4									
		6									
12.0	SS-5	11		-	-			D			PID = 1.6 PPM SS-6, 10:25am
		3									
		8									
		13									
14.0	SS-6	16		-	-			D			PID = 2.7 PPM SS-7, 10:42am
		5									
		8									
		12									
16.0	SS-7	11		-	-			D			PID = 1.1 PPM SS-8, 10:53am
		6									
		7									
		7									
18.0	SS-8	7		-	-			D			PID = 1 PPM SS-9, 11:01am Heavily iron stained in SS-9
		4									
		6									
20.0	SS-9	35		-	-			D			

NOTES: Iron staining prevalent through the entire length of the boring.
Boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. F-5
SHEET 2 OF 2
DATE: START 4/6/12
O.G. END 4/6/12
ELEV. 1150.9 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 433193.33 EASTING 1283434

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
21.3	SS-10	2 24 50/0.3		-	-	cl	D		9.2' to 21.5' Silty Clay with rock fragments (cl), brown and gray, moist to dry, stiff, no odor, (FILL)(continued)	PID = 3.2 PPM SS-10, 11:10am
22.0	AU			-	-	sp	D		21.5' to 24.5' Sand and rock fragments (sp), gray, dry, very dense, no odor, (SAPROLITE)	PID = 1.1 PPM SS-11, 11:22am
22.2	SS-11	50/0.2		-	-		D			
24.0	AU			-	-		D			
24.4	SS-12	50/0.4		-	-		D			PID = 1.5 PPM SS-12, 11:35am
									End of Boring @ 24.5 ft.	

NOTES: Iron staining prevalent through the entire length of the boring.
Boring backfilled with bentonite grout and topped with cement.

ENGINEERS FIELD BORING LOG

BORING NO. F-11
SHEET 1 OF 3
DATE: START 4/13/12
O.G. END 4/13/12
ELEV. 1147.9 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 432616.01 EASTING 1283405

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 48.0 ft. TIME: 1140 DATE: 04/13/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐[illegible]

NOTES: Auger refusal encountered at 4.0'. Driller advanced tri-cone bit with air compression to a total depth of 58' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with auger cuttings and bentonite chips.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO.	<u>F-11</u>
SHEET	<u>2</u> OF <u>3</u>
DATE: START	<u>4/13/12</u>
O.G. END	<u>4/13/12</u>
ELEV.	<u>1147.9 ft.</u>

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 432616.01 EASTING 1283405

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 48.0 ft. TIME: 1140 DATE: 04/13/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
58.0				-	-	-						

NOTES: Auger refusal encountered at 4.0'. Driller advanced tri-cone bit with air compression to a total depth of 58' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with auger cuttings and bentonite chips.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO.	F-11
SHEET	3 OF 3
DATE: START	4/13/12
O.G. END	4/13/12
ELEV.	1147.9 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 432616.01 EASTING 1283405

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 48.0 ft. TIME: 1140 DATE: 04/13/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
58.0				-	-						End of Boring @ 58.0 ft.	

NOTES: Auger refusal encountered at 4.0'. Driller advanced tri-cone bit with air compression to a total depth of 58' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with auger cuttings and bentonite chips.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433410.45 EASTING 1283527

BORING NO. G-3
SHEET 1 OF 2
DATE: START 4/3/12
O.G. END 4/3/12
ELEV. 1148.3 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
									0.0' to 1.3' Concrete, dry, no odor	
2.0	RC-1			-		cl	D		1147.0	PID = 4.5 PPM SS-1, 12:43pm
4.0	SS-1	3 5 5 7		-	-		D		1.3' to 14.0' Silty Clay trace medium to coarse sand and gravel (cl), brown to gray, dry, medium stiff to stiff, no odor, (FILL)	PID = 4.2 PPM SS-2, 12:51pm
6.0	SS-2	1 3 2 4		-	-		D			PID = 5.6 PPM SS-3, 1:00pm
8.0	SS-3	1 2 2 6		-	-		D			PID = 2.9 PPM SS-4, 1:07pm
10.0	SS-4	WOH 2 2 3		-	-		M			PID = 5.9 PPM SS-5, 1:13pm
12.0	SS-5	1 3 2 3		-	-		M			TerraCore soil sample collected from SS-5 PID = 2.2 PPM SS-6, 1:24pm
14.0	SS-6	3 5 9 10		-	-		D		1134.3	PID = 2.9 PPM SS-7, 1:32pm
16.0	SS-7	3 7 12 13		-	-	sp cl	D		14.0' to 14.3' Sand (sp), light brown, medium to coarse, dry, loose, no odor, (FILL)	PID = 3.2 PPM SS-8, 1:37pm
18.0	SS-8	4 8 13 15		-	-		D		14.3' to 22.9' Silty Clay trace rock fragments (cl), brown and gray, dry, stiff, no odor, (FILL)	PID = 1.9 PPM SS-9, 1:49pm
20.0	SS-9	4 5 8 11		-	-		D			

NOTES: Iron staining prevalent throughout the entire length of the boring.
Boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. G-3
SHEET 2 OF 2
DATE: START 4/3/12
O.G. END 4/3/12
ELEV. 1148.3 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 433410.45 EASTING 1283527

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
22.0	SS-10	3 6 8 8		-	-	cl	D		14.3' to 22.9' Silty Clay trace rock fragments (cl), brown and gray, dry, stiff, no odor, (FILL)(continued)	PID = 5.7 PPM SS-10, 1:57pm
		10 14 50				sp	D		22.9' to 24.0' Silty Sand (sp), light brown, medium to coarse, dry, very dense, no odor, (FILL)	PID = 2.9 PPM SS-11, 2:10pm
23.7	SS-11			-	-		D			
24.0	AU			-	-		D			
24.3	SS-12	50/0.3		-	-	sp	D		24.0' to 24.3' Silty Sand and rock fragments (sp), light brown, medium to coarse, dry, very dense, no odor, (RESIDUUM) End of Boring @ 24.3 ft.	PID = 2.4 PPM SS-12, 2:21pm

NOTES: Iron staining prevalent throughout the entire length of the boring.
Boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

PROJECT NAME **911th Airlift Wing T-Ramp** COUNTY **Allegheny**
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING **433704.36** EASTING **1283619**

BORING NO. **H-0**
SHEET **1** OF **4**
DATE: START **4/16/12**
O.G. END **4/16/12**
ELEV. **1148.0 ft.**

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY **Joe Beck/Geo-Environmental Drilling**

EQUIPMENT USED **CME 45 truck rig with a donut hammer**

DRILLING METHODS **4-1/4" HSA with split inner barrel and tri-cone air compression**

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: **57.0 ft.** TIME: **1345** DATE: **04/16/12**

CHECKED BY: **E. DeLattre** ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
1.3	RC-1			-				D		0.0' to 1.3' Concrete, dry, no odor	
3.3	AU	3		-	-	cl		D		1.3' to 4.0' Silty Clay with rock fragments (cl), brown, dry, very stiff, no odor, (FILL)	PID = 0.2 PPM SS-1, 10:56am Iron staining throughout SS-1
4.0	SS-1	8		-	-			M		4.0' to 4.3' SANDSTONE, brown, completely weathered	PID = 1 PPM SS-2, 11:02am
6.0	SS-2	9		-	-	cl		D		4.3' to 9.5' Silty Clay with rock fragments (cl), brown to gray, dry to moist, very stiff to stiff, no odor, (FILL)	PID = 2.7 PPM SS-3, 11:12am TerraCore soil sample collected from SS-3
8.0	SS-3	10		-	-			D			PID = 1.1 PPM SS-4, 11:19am
10.0	SS-4	11		-	-	cl		M		9.5' to 12.0' Silty Clay with coarse sand trace gravel (cl), orangeish brown and gray, dry, hard, no odor, (FILL)	PID = 0.4 PPM SS-5, 11:28am 0.1' brown sand lens at 10.3'
11.9	SS-5	11		-	-			D			PID = 0.2 PPM SS-6, 11:41am
12.0	AU	50/0.4		-	-			D			
14.0	SS-6	23		-	-			D			PID = 0.3 PPM S-7, 11:53am
16.0	SS-7	24		-	-			D - M			Heavy iron staining at the bottom of SS-7 PID = 0.2 PPM SS-8, 12:07am
18.0	SS-8	25		-	-			M			Sandstone fragments in bottom of SS-8 PID = 0 PPM SS-9 12:20am
19.2	SS-9	28		-	-			M - W		18.0' to 19.0' SHALE, brown, completely weathered to highly weathered, thinly bedded	Wet zone 18.8'-19.0'
73.0		37		-	-			-		19.0' to 19.2' SANDSTONE, brown, highly weathered	

NOTES: Auger refusal encountered at 19.2'. Driller advanced tri-cone bit with air compression to a total depth of 73' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO.	<u>H-0</u>
SHEET	<u>2</u> OF <u>4</u>
DATE: START	<u>4/16/12</u>
O.G. END	<u>4/16/12</u>
ELEV.	<u>1148.0 ft.</u>

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433704.36 EASTING 1283619

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 57.0 ft. TIME: 1345 DATE: 04/16/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
73.0				-	-	-						

NOTES: Auger refusal encountered at 19.2'. Driller advanced tri-cone bit with air compression to a total depth of 73' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO.	<u>H-0</u>
SHEET	<u>3</u> OF <u>4</u>
DATE: START	<u>4/16/12</u>
O.G. END	<u>4/16/12</u>
ELEV.	<u>1148.0 ft.</u>

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433704.36 EASTING 1283619

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 57.0 ft. TIME: 1345 DATE: 04/16/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
73.0				-	-	-						

NOTES: Auger refusal encountered at 19.2'. Driller advanced tri-cone bit with air compression to a total depth of 73' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. H-0
SHEET 4 OF 4
DATE: START 4/16/12
O.G. END 4/16/12
ELEV. 1148.0 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433704.36 EASTING 1283619

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 57.0 ft. TIME: 1345 DATE: 04/16/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
73.0				-	-							
											End of Boring @ 73.0 ft.	

NOTES: Auger refusal encountered at 19.2'. Driller advanced tri-cone bit with air compression to a total depth of 73' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. H-6
SHEET 1 OF 2
DATE: START 4/6/12
O.G. END 4/6/12
ELEV. 1150.7 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 433104.73 EASTING 1283631

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
										0.0' to 1.0', no odor	
										1149.7	
2.0	AU			-	-			D		1.0' to 2.0', no odor	
										1148.7	
		10				cl				2.0' to 4.0' Silty Clay (cl), light gray, dry, hard, no odor, (FILL)	PID = 1.4 PPM SS-1, 12:30pm
		21									
		22									
4.0	SS-1	19		-	-			D		1146.7	
		7				cl				4.0' to 7.7' Silty Clay and rock fragments (cl), gray, dry, hard to stiff, no odor, (FILL)	PID = 2.4 PPM SS-2, 12:38pm Heavy iron staining from 4.0'-7.7'
		18									
		13									
6.0	SS-2	9		-	-			D			PID = 1.8 PPM SS-3, 12:45pm
		6									
		7									
		7									
8.0	SS-3	9		-	-	sc		D		1143.0	
		6				cl				7.7' to 8.0' Clayey Sand (sc), brown, fine to medium, dry, medium dense, no odor, (FILL)	PID = 2 PPM SS-4, 12:50pm
8.8	SS-4	50/0.3						D			
										8.0' to 19.4' Silty Clay with rock fragments (cl), brown and gray, dry, very stiff, no odor, (FILL)	PID = 2.7 PPM SS-5, 12:57pm
10.0	AU			-	-			D			
		5									
		12									
		8									
12.0	SS-5	11		-	-			D			PID = 1.8 PPM SS-6, 1:07pm
		3									
		23									
13.2	SS-6	50/0.2						D			
14.0	AU			-	-			D			PID = 2.8 PPM SS-7, 1:13pm TerraCore soil sample collected from SS-7
		5									
		14									
		16									
16.0	SS-7	9		-	-			D			PID = 1.4 PPM SS-8, 1:21pm
		7									
		13									
		10									
18.0	SS-8	13		-	-			D			PID = 1.1 PPM SS-9, 1:30pm
		6									
		5									
		6									
20.0	SS-9	9		-	-			D		1131.3	

NOTES: Boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. H-6
SHEET 2 OF 2
DATE: START 4/6/12
O.G. END 4/6/12
ELEV. 1150.7 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 433104.73 EASTING 1283631

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./ TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%) RQD (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
22.0	SS-10	4 4 5 8		-	-	cl	D		19.4' to 21.0' SHALE, light gray, completely weathered to highly weathered, very thinly intensely laminated(continued)	PID = 0.6 PPM SS-10, 1:35pm
24.0	SS-11	3 8 11 14		-	-		D		21.0' to 26.0' Silty Clay with rock fragments (cl), brown and gray, dry, very stiff, no odor, (FILL)	PID = 0.6 PPM SS-11, 1:48pm
26.0	SS-12	4 8 11 10		-	-		D			PID = 0.4 PPM SS-12, 1:58pm
									End of Boring @ 26.0 ft.	

NOTES: Boring backfilled with bentonite grout and topped with cement.

ENGINEERS FIELD BORING LOG

BORING NO. H-8
SHEET 1 OF 2
DATE: START 4/9/12
O.G. END 4/9/12
ELEV. 1149.7 ft.

ENGINEERS & CONSULTANTS, INC.
PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 432949.9 EASTING 1283637

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____; DEPTH: _____; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./ TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
		5							0.0' to 0.4', brown, dry, loose, (TOPSOIL)	PID = 0.2 PPM
		7				gp			0.4' to 2.0' Silty Sand some rock fragments (gp), brown, fine to medium, dry, no odor, poorly graded, (FILL)	SS-1, 9:30am
2.0	SS-1	25		-	-		D		1149.3	
		5				gp			2.0' to 3.8' Gravel with silty clay and fine sand (gp), brown, fine, dry, medium dense, no odor, poorly graded, (FILL)	PID = 0.1 PPM
		9								SS-2, 9:45am
		6								
4.0	SS-2	28		-	-		D		1145.9	
		32							3.8' to 5.6' SANDSTONE, light gray, highly weathered, thinly bedded	PID = 0.2 PPM
		21								SS-3, 9:51am
		16								
6.0	SS-3	8		-	-	cl	D		1144.1	
		10							5.6' to 12.0' Silty Clay some rock fragments (cl), brown and gray, moist, very stiff to stiff, no odor, (FILL)	PID = 0.4 PPM
		9								SS-4, 10:00am
		12					M			
8.0	SS-4	13		-	-					
		4								SS-5, No PID reading - driller discarded split spoon before sample collected
		5								
		3								
10.0	SS-5	2		-	-		M			
		0								PID = 1.2 PPM
		23								SS-6, 10:19am
		4								Rods bent during sampling
12.0	SS-6	5		-	-		M		1137.7	
									12.0' to 15.0'	
										Void from 12.0' to 15.0' (rods dropped 3.0')
15.0				-	-		M		1134.7	
		1				cl			15.0' to 19.0' Silty Clay (cl), brown and gray, moist, medium stiff, no odor, (FILL)	PID = 1.2 PPM
		2								SS-7, 10:30am
		4								TerrCore soil sample collected from SS-7
17.0	SS-7	3		-	-		M			
		2								PID = 1.2 PPM
		1								SS-8, 10:49am
		4								
19.0	SS-8	5		-	-	cl	M		1130.7	
										PID = 0.5 PPM
21.0	SS-9	6		-	-		M			SS-9, 10:58am

NOTES: Boring backfilled with auger cuttings and bentonite chips.
Difficulty backfilling boring due to 3.0' void from 12.0'-15.0'.

ENGINEERS FIELD BORING LOG

BORING NO. H-8
SHEET 2 OF 2
DATE: START 4/9/12
O.G. END 4/9/12
ELEV. 1149.7 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 432949.9 EASTING 1283637

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling




EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____; DEPTH: _____; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./ TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY(%) RQD (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
21.0	SS-9	7 10 13		-	-	cl	M		19.0' to 25.0' Silty Clay some rock fragments (cl), reddish brown to brown, moist, very stiff to medium stiff, no odor, (FILL)(continued)	PID = 0.8 PPM SS-10, 11:11am
23.0	SS-10	3 8 10 10		-	-		M			PID = 0.8 PPM SS-11, 11:18am
25.0	SS-11	3 3 4 4		-	-		M		1124.7	
									End of Boring @ 25.0 ft.	

NOTES: Boring backfilled with auger cuttings and bentonite chips.
Difficulty backfilling boring due to 3.0' void from 12.0'-15.0'.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. I-4
SHEET 1 OF 5
DATE: START 4/19/12
O.G. END 4/19/12
ELEV. 1148.0 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 433308.5 EASTING 1283724

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
										0.0' to 0.8' Asphalt	
2.0	AU			-	-	gp		D		1147.2	
3.6	SS-1	30		-	-			D		0.8' to 4.0' Sandy Gravel (gp), black to light gray, fine to coarse, dry, very dense, no odor, poorly graded, (FILL)	PID = 2.4 PPM SS-1, 9:40am TerraCore soil sample collected from SS-1
4.0	AU	48		-	-			D		1144.0	
5.1	SS-2	30		-	-			D - M		4.0' to 10.1' SHALE, light gray, highly weathered	PID = 0.3 PPM SS-2
6.0	AU	50/0.1		-	-			M			PID = 0.9 PPM SS-3
8.0	SS-3	14		-	-			M			PID = 0.5 PPM SS-4
10.0	SS-4	20		-	-			W			PID = 0.9 PPM SS-5
12.0	SS-5	35		-	-	cl		M		10.1' to 12.5' Silty Clay some gravel (cl), tan and orangeish brown, fine to coarse, moist, stiff, no odor, (FILL)	PID = 0.8 PPM SS-6
14.0	SS-6	3		-	-			D		12.5' to 13.3' SHALE, light gray, highly weathered	PID = 0.6 PPM SS-7
16.0	SS-7	25		-	-	ml		D - M		13.3' to 14.3' Clayey Silt trace sand (ml), light brown and orangeish brown, fine to coarse, moist, stiff, no odor, (FILL)	PID = 0.9 PPM SS-8
18.0	SS-8	11		-	-			D - M		14.3' to 15.0' SHALE, highly weathered	PID = 1.3 PPM SS-9
19.0	SS-9	7		-	-			D		15.0' to 15.3' Clayey Silt some gravel trace sand (ml), light brown and orangeish brown, moist, stiff, no odor, (FILL)	
83.0		12		-	-					15.3' to 18.0' SHALE, orangeish tan, highly weathered	
		24		-	-					18.0' to 19.0' SANDSTONE, light orangeish gray	
		19		-	-						
		23		-	-						
		15		-	-						

NOTES: Auger refusal encountered at 19.0'. Driller advanced tri-cone bit with air compression to a total depth of 83' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. I-4
SHEET 2 OF 5
DATE: START 4/19/12
O.G. END 4/19/12
ELEV. 1148.0 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433308.5 EASTING 1283724

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
83.0				-	-			-			

NOTES: Auger refusal encountered at 19.0'. Driller advanced tri-cone bit with air compression to a total depth of 83' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO.	I-4
SHEET	3 OF 5
DATE: START	4/19/12
O.G. END	4/19/12
ELEV.	1148.0 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433308.5 EASTING 1283724

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
83.0				-	-							

NOTES: Auger refusal encountered at 19.0'. Driller advanced tri-cone bit with air compression to a total depth of 83' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO.	I-4
SHEET	4 OF 5
DATE: START	4/19/12
O.G. END	4/19/12
ELEV.	1148.0 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433308.5 EASTING 1283724

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
83.0				-	-		-			

NOTES: Auger refusal encountered at 19.0'. Driller advanced tri-cone bit with air compression to a total depth of 83' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.

ENGINEERS FIELD BORING LOG

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING **433308.5** EASTING **1283724**

BORING NO. I-4
SHEET 5 OF 5
DATE: START 4/19/12
O.G. END 4/19/12
ELEV. 1148.0 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with a donut hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)		SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY(%)	RQD (%)	POCKET PENT/ TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
83.0					'		'			'		End of Boring @ 83.0 ft.	

NOTES: Auger refusal encountered at 19.0'. Driller advanced tri-cone bit with air compression to a total depth of 83' and installed a temporary well. Upon removal of the temporary well, the boring was backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433629.6 EASTING 1283810

BORING NO. J-1
SHEET 1 OF 2
DATE: START 4/2/12
O.G. END 4/2/12
ELEV. 1146.1 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
2.0	SS-1	1 2 5 6		-	-	sp	D		0.0' to 5.0' Silty Sand some rock fragments (sp), brown to light brown, coarse, dry, loose to medium dense, no odor, poorly graded, (FILL)	PID = 1.6 PPM SS-1, 11:00am
4.0	SS-2	5 7 6 6		-	-		D			PID = 10.1 PPM SS-2, 11:10am TerraCore soil sample collected from SS-2
6.0	SS-3	1 2 2 3		-	-	cl	M		5.0' to 19.0' Silty Clay with rock fragments (cl), dark reddish brown and gray, moist to dry, medium stiff to hard, no odor, (FILL)	PID = 8.8 PPM SS-3, 11:16am
8.0	SS-4	WOH 2 4 5		-	-		M			PID = 0.7 PPM SS-4, 11:35am
10.0	SS-5	1 3 6 12		-	-		M			PID = 3.2 PPM SS-5, 11:42am
12.0	SS-6	3 8 13 15		-	-		M			PID = 3.1 PPM SS-6, 11:55am Sandy with roots in SS-6
14.0	SS-7	4 7 10 11		-	-		D			PID = 3.1 PPM SS-7, 12:10pm
16.0	SS-8	4 5 6 7		-	-		D			PID = 2.9 PPM SS-8, 12:18pm
18.0	SS-9	5 6 7 20		-	-		D			PID = 2.1 PPM SS-9, 12:30pm
20.0	SS-10	4 13 20 28		-	-		D			PID = 4.6 PPM SS-10, 12:40pm

NOTES: Iron staining prevalent throughout entire length of the boring.
Boring backfilled with auger cuttings.

ENGINEERS FIELD BORING LOG

ENGINEERS & CONSULTANTS, INC.
PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING **433629.6** EASTING **1283810**

BORING NO. J-1
SHEET 2 OF 2
DATE: START 4/2/12
O.G. END 4/2/12
ELEV. 1146.1 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS **3-1/4" HSA with split inner barrel**

CASING: SIZE: _____; DEPTH: _____; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO. / TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
22.0	SS-11	9 22 33 30		-	-			D		19.0' to 22.0' SHALE, gray, residual soil weathered to completely weathered, very thinly bedded(<i>continued</i>)	PID = 4.4 PPM SS-11, 12:52pm
										End of Boring @ 22.0 ft.	

NOTES: Iron staining prevalent throughout entire length of the boring.
Boring backfilled with auger cuttings.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. K-6
SHEET 1 OF 2
DATE: START 4/12/12
O.G. END 4/12/12
ELEV. 1149.0 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny

STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____

NORTHING 433051.09 EASTING 1283851

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
2.0	AU					cl				0.0' to 0.4', brown, dry, (TOPSOIL) 1148.6	
		6		-	-					0.4' to 3.7' Silty Clay with rock fragments (cl), brown to gray, dry, very stiff, no odor, (FILL)	PID = 0.5 PPM SS-1, 11:29am 0.1' thick layer of brown sand at 2.5'
4.0	SS-1	11		-	-	gp				1145.3	
		3		-	-	cl				3.7' to 4.0' Gravel with coarse sand (gp), dark gray, dry, no odor, poorly graded, (FILL)	PID = 2 PPM SS-2, 11:37am TerraCore soil sample collected from SS-2 Iron staining throughout SS-2
6.0	SS-2	30		-	-					4.0' to 6.0' Silty Clay with rock fragments (cl), brown, dry, stiff, no odor, (FILL) 1143.0	PID = 1.7 PPM SS-3, 11:50am
		16		-	-	sw				6.0' to 9.5' Sand with gravel and rock fragments (sw), brown, coarse, dry, dense to medium dense, no odor, well graded, (FILL)	PID = 1.5 PPM SS-4, 12:00pm
8.0	SS-3	15		-	-						
		14		-	-						
		13		-	-						
10.0	SS-4	14		-	-	sw				9.5' to 10.8' Sand with rock fragments (sw), gray to brown, coarse, dry, medium dense to very dense, no odor, well graded, (FILL) 1139.5	PID = 1.1 PPM SS-5, 12:11pm
10.8	SS-5	7		-	-						
11.0	AU	50/0.3		-	-					1138.2	
				-	-					11.0' to 18.0'	
18.0				-	-					1131.0	
23.5	AU			-	-						

NOTES: Auger refusal at 11.0'. Driller advanced tri-cone bit with air comp. to 18.0', (in softer material). Driller augered to 23.5' -drilling rod coupler sheared. Upon completion, the boring was backfilled with auger cuttings, bentonite chips, and cement.

ENGINEERS FIELD BORING LOG

ENGINEERS & CONSULTANTS, INC.
PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433051.09 EASTING 1283851

BORING NO. K-6
SHEET 2 OF 2
DATE: START 4/12/12
O.G. END 4/12/12
ELEV. 1149.0 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammerDRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO. / TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	RQD (%)	POCKET PENT/ TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
23.5	AU			-	-				D		End of Boring @ 23.5 ft.	Difficulty augering, drilling rod coupler sheared at 23.5'; temporary well not installed

NOTES: Auger refusal at 11.0'. Driller advanced tri-cone bit with air comp. to 18.0', (in softer material). Driller augered to 23.5' -drilling rod coupler sheared. Upon completion, the boring was backfilled with auger cuttings, bentonite chips, and cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433553.01 EASTING 1284019

BORING NO. L-2
SHEET 1 OF 3
DATE: START 4/11/12
O.G. END 4/11/12
ELEV. 1144.2 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 4.0 ft. TIME: 1156 DATE: 04/11/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: 24.3 ft. TIME: 1339 DATE: 04/12/12

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
									0.0' to 0.8' Asphalt, no odor	
2.0	AU			-	-	gp	D		1143.4 0.8' to 3.6' Gravel with coarse sand (gp), brown, coarse, wet to moist, medium dense, no odor, poorly graded, (FILL)	PID = 0.4 PPM SS-1, 11:51am
4.0	SS-1	12 9 9 8		-	-	cl	W - M		1140.6 3.6' to 5.5' Silty Clay with gravel (cl), gray to brownish gray, wet to moist, stiff, organic odor, (FILL)	PID = 0.6 PPM SS-2, 12:04pm
6.0	SS-2	5 8 10 11		-	-	gp	W - M		1138.7 5.5' to 7.5' Gravel with coarse sand trace rock fragments (gp), dark gray, coarse, moist, medium dense, organic odor, poorly graded, (FILL)	PID = 0.7 PPM SS-3, 12:18pm TerraCore soil sample collected from SS-3
8.0	SS-3	26 9 10		-	-	cl	D		1136.7 7.5' to 8.5' Silty Clay (cl), dark brown, dry to wet, hard, no odor, (FILL)	Iron staining throughout SS-3 PID = 0.4 PPM SS-4, 12:26pm
10.0	SS-4	3 4 7 7		-	-	cl	D - W		1135.7 8.5' to 18.0' Silty Clay trace rock fragments (cl), brown to reddish brown, wet, medium stiff to hard, no odor, (FILL)	PID = 0.4 PPM SS-5, 12:35pm
12.0	SS-5	3 3 4 7		-	-		W			PID = 0.1 PPM SS-6, 12:47pm
14.0	SS-6	4 5 7 8		-	-		M - W			SS-7, No PID reading - 0% recovery
16.0	SS-7	12 20 27		-	-		W			SS-8, No PID reading - 0% recovery
16.8	SS-8	36 50/0.3		-	-		W			
18.0	AU			-	-		W			
18.2	SS-9	50/0.2		-	-		W		1126.2 18.0' to 20.0' SHALE, brown, highly weathered	PID = 0.1 PPM SS-9, 1:45pm
19.0	AU			-	-		W			
20.0				-	-		-		1124.2	

NOTES: Auger refusal at 19.0'. Advanced tri-cone bit (air) to 20.0' (boulder). Began sampling at 20.0', refusal at 23.0'. Advanced tri-cone bit (air) to 43.0'- installed a temp. well. Upon removal of the temp.well, boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO. L-2
SHEET 2 OF 3
DATE: START 4/11/12
O.G. END 4/11/12
ELEV. 1144.2 ft.

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433553.01 EASTING 1284019

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 4.0 ft. TIME: 1156 DATE: 04/11/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: 24.3 ft. TIME: 1339 DATE: 04/12/12

NOT ENCOUNTERED ☐

DEPTH (FT.)	SAMPLE NO./ TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
20.2	SS-10	50/0.2			-		M		20.0' to 23.0' SANDSTONE, brown, completely weathered to highly weathered	PID = 0.1 PPM SS-10, 2:35pm Softer material encountered at 20'; driller attempted to sample SS-10
23.0	AU			-	-		M			1121.2
43.0				-	-		-			

NOTES: Auger refusal at 19.0'. Advanced tri-cone bit (air) to 20.0' (boulder). Began sampling at 20.0', refusal at 23.0'. Advanced tri-cone bit (air) to 43.0'- installed a temp. well. Upon removal of the temp.well, boring backfilled with bentonite grout and topped with cement.

ENGINEERS FIELD BORING LOG

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433553.01 EASTING 1284019

BORING NO. L-2
SHEET 3 OF 3
DATE: START 4/11/12
O.G. END 4/11/12
ELEV. 1144.2 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 4-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 4.0 ft. TIME: 1156 DATE: 04/11/12

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: 24.3 ft. TIME: 1339 DATE: 04/12/12

NOT ENCOUNTERED ☐

DEPTH (FT.)		SAMPLE NO. / TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)		POCKET PENT/ TORVANE (TSF)	USCS		H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
RQD (%)					AASHTO								
43.0													
												End of Boring @ 43.0 ft.	

NOTES: Auger refusal at 19.0'. Advanced tri-cone bit (air) to 20.0' (boulder). Began sampling at 20.0', refusal at 23.0'. Advanced tri-cone bit (air) to 43.0'- installed a temp. well. Upon removal of the temp. well, boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433335.38 EASTING 1283990

BORING NO. L-4
SHEET 1 OF 2
DATE: START 4/3/12
O.G. END 4/3/12
ELEV. 1147.0 ft.

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel and tri-cone air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
2.0	AU			-	-		D		0.0' to 2.0' Asphalt, dry, no odor	
4.0	SS-1	11 14 22 7		-	-	sp cl	D		2.0' to 3.7' Clayey Sand with gravel (sp), dark brown, coarse, dry, dense, no odor, poorly graded, (FILL)	PID = 2.2 PPM SS-1, 8:58am
6.0	SS-2	4 5 33 42		-	-		M		3.7' to 18.0' Silty Clay with gravel trace rock fragments (cl), light brown to gray, moist, hard, organic odor, (FILL)	Iron staining throughout samples SS-2 to SS-8 PID = 2.2 PPM SS-2, 9:07am
8.0	SS-3	7 8 12 17		-	-		M			PID = 3.2 PPM SS-3, 9:19am
10.0	SS-4	4 15 22 11		-	-		M			PID = 1.9 PPM SS-4, 9:25am
12.0	SS-5	10 24 18 12		-	-		M			PID = 2 PPM SS-5, 9:38am
14.0	SS-6	5 9 7 11		-	-		M			PID = 1.9 PPM SS-6, 9:46am
16.0	SS-7	35 14 7 3		-	-		M			SS-7, No PID reading - 0% recovery
18.0	SS-8	13 8 6 6		-	-		M			PID = 2.9 PPM SS-8, 10:10am
20.0	SS-9	3 4 2 3		-	-	cl	M		18.0' to 25.0' Silty Clay with rock fragments (cl), brown to gray, moist, medium stiff, no odor, (FILL)	PID = 4.8 PPM SS-9, 10:20am

NOTES: Boring backfilled with bentonite grout and topped with cement.



4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044
P. 724.443.4111

ENGINEERS FIELD BORING LOG

BORING NO.	<u>L-4</u>
SHEET	<u>2</u> OF <u>2</u>
DATE: START	<u>4/3/12</u>
O.G. END	<u>4/3/12</u>
ELEV.	<u>1147.0 ft.</u>

PROJECT NAME 911th Airlift Wing T-Ramp COUNTY Allegheny
STATE RT. NO. _____ SECT. _____ SEGMENT _____ OFFSET _____
NORTHING 433335.38 EASTING 1283990

INSPECTOR (SIGNED) _____ DRILLERS NAME/COMPANY Joe Beck/Geo-Environmental Drilling

EQUIPMENT USED CME 45 truck rig with an automatic hammer

DRILLING METHODS 3-1/4" HSA with split inner barrel and tri-come air compression

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____

CHECKED BY: E. DeLattre ; DATE: _____ DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☒

DEPTH (FT.)	SAMPLE NO./TYPE	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	GRAPHIC	DESCRIPTION	REMARKS
22.0	SS-10	2 2 3 5		-	-	cl		M		18.0' to 25.0' Silty Clay with rock fragments (cl), brown to gray, moist, medium stiff, no odor, (FILL)(continued)	PID = 2.2 PPM SS-10, 10:28am
24.0	SS-11	3 4 5 6		-	-			M			PID = 5.8 PPM SS-11, 10:42am TerraCore soil sample collected from SS-11
25.0	SS-12	5 10		-	-			M			PID = 2.6 PPM SS-12, 10:55am
										End of Boring @ 25.0 ft.	

NOTES: Boring backfilled with bentonite grout and topped with cement.

ATTACHMENT C

CHAIN OF CUSTODIES
&
LABORATORY ANALYTICAL RESULTS

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1
1521513

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: RHEA ENGINEERS		Report To: JASON MCCABE		Attention:	
Address: 4975 WILLIAM FLYNN HWY		Copy To:		Company Name:	
SUITE 14		Purchase Order No.:		Address:	
Email To: COM & RHEA; JASON.MCCABE@RHEA.US		Project Name: 911TH AW T-RAMP		Pace Quote Reference:	
Phone: 724-443-4111 Fax:		Project Number:		Pace Project Manager:	
Requested Due Date/TAT: STANDARD				Pace Profile #:	
REGULATORY AGENCY					
<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____					
Site Location					
STATE: _____					

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		TCL/VOCS	TOTAL LEAD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	</

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
	Sara Mullaney	4/3/12	5:27PM	Brian Schaffner	4/3/12	5:27					
	Brian Schaffner	4/4/12	4:40	AD	4/4/12	16:40	1.1	Y	N	Y	
					4/4/12						

ORIGINAL

SAMPLER NAME AND SIGNATURE: SARA MULLANEY		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: SARA MULLANEY					
SIGNATURE of SAMPLER: Sara Mullaney					
DATE Signed (MM/DD/YY): 4/3/12					

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1
1521510

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: <u>Rhea Engineering</u>		Report To:		Attention: <u>Dan DePina</u>	
Address: <u>1475 W. Highway 100</u>		Copy To:		Company Name: <u>CDM</u>	
Email To: <u>jason@rhea.us</u>		Purchase Order No.:		Address:	
Phone: <u>774 744 4111</u> Fax:		Project Name:		Pace Quote Reference:	
Requested Due Date/TAT:		Project Number:		Pace Project Manager:	
				Pace Profile #:	
REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____					
Site Location:				STATE: _____	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Y/N	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		Analysis Test ↓	TCL - VOCs	TOTAL LEAD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jason McCalis

SIGNATURE of SAMPLER: Jason McCalis

DATE Signed (MM/DD/YY): 4/5/12

Temp in °C
Received on Ice (Y/N)
Custody Sealed Cooler (Y/N)
Samples Intact (Y/N)

Sample Condition Upon Receipt



Client Name: Rhea Engineers

Project # 3060909

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace Other _____

Tracking #: NA

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other Bags/Fram

Thermometer Used 3 5 6

Type of Ice: Wet Blue None

Cooler Temperature

Temp should be above freezing to 6°C

Biological Tissue is Frozen: Yes No

Comments:

Optional
Proj. Due Date:
Proj. Name:

Date and Initials of person examining contents: JD 4/14/12

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>SL</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>JD</u> Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 4-9-12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALLC003-4 23Feb2010



Sample Condition Upon Receipt

Client Name:

Rhea Engineers

Project #

30606909

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ noPacking Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☒ Other foamThermometer Used 5 6 7Type of Ice Wet Blue None☒ Samples on ice, cooling process has begunCooler Temperature 2.9

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Optional

Proj. Due Date:

Proj. Name:

Date and Initials of person examining contents: SL 4-6-12

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>SL</u>	
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>SL</u> Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date:

4-9-12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A

Required Client Information:

Company: RHEA ENGINEERS & CONSULTANTS

Address: 4975 WILLIAM FLYNN HWY STE 14

GIBSONIA, PA 15044

Email To: JASON.MCCABE@RHEA.US

Phone: 724-443-4111

Fax:

Requested Due Date/TAT:

STANDARD

Section B

Required Project Information:

Report To: JASON MCCABE

Copy To:

Purchase Order No.:

Project Name: 911TH AIRLIFT WING T-RAMP

Project Number:

Section C

Invoice Information:

Attention:

Company Name:

Address:

Pace Quote Reference:

Pace Project Manager:

Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location:

PA

STATE:

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Y/N	Analysis Test ↓	TOL-VOCs	Total Lead																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
--------	--	--	-------------	-----------------------------	-----------	--	--	--	---------------------------	-----------------	---------------	--	--	--	--	--	--	--	-----	-----------------	----------	------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	SARA MULLANEY/RHEA	4/10/12	1:38	RLM	4-10-12	1:40	
	RLM	4-10-12	3:15		4/10/12	15:15	3.1 Y ~ Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: SARA MULLANEY

SIGNATURE of SAMPLER: *Sara Mullaney*

DATE Signed

(MM/DD/YY): 4/10/12

Temp in °C

Received on Ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)



Sample Condition Upon Receipt

Client Name: RheaProject # 3067122Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ noPacking Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☒ Other PeamThermometer Used 5 6 7Type of Ice: Wet Blue None☒ Samples on ice, cooling process has begunCooler Temperature 3.1

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Optional

Proj. Due Date:

Proj. Name:

Date and Initials of person examining contents: Ver 4/10/12

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8. out and with only 1/4 full
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests <u>Protein</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>SL</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed <u>Ver</u> Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 4-11-12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Sample Condition Upon Receipt

Client Name: RheaProject # 3067122Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ noSeals intact: ☐ yes ☐ no

Optional

Proj. Due Date: _____

Proj. Name: _____

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other foamThermometer Used 5 6 7Type of Ice: Wet Blue None☒ Samples on ice, cooling process has begunCooler Temperature 0.2

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 4-12-12

Temp should be above freezing to 6°C

Comments: _____

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>SL</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>STN</u> Lot # of added preservative _____
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 4-13-12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Sample Condition Upon Receipt

Client Name: Rhea Engineers & Consultants Project # 3067598

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other Foam

Thermometer Used 5 6 7

Type of Ice: ☒ Wet ☐ Blue ☐ None ☒ Samples on ice, cooling process has begun

Cooler Temperature 0.8

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Optional
Proj. Due Date:
Proj. Name:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>SL</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, W-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed <u>AD</u> Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 4-18-12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Sample Condition Upon Receipt

Client Name: Rhea Engineers

Project # 3067855

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace Other _____

Tracking #: NA

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other Bag / Foam

Thermometer Used 5 6 7

Type of Ice: Wet Blue None

☐ Samples on ice, cooling process has begun

Cooler Temperature 3.5

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: JD 4/20/12

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>WTF / SL</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>JD</u> Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 4/27/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Sample Condition Upon Receipt

Pace Analytical

Client Name: Rhea Engineers

Project # 3008551

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: NA

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used 5 6 7

Type of Ice: Wet Blue None

Cooler Temperature 0.9

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Optional
Proj. Due Date:
Proj. Name:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>AD</u> Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 5-1/2

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Sample Condition Upon Receipt

Client Name: Rhea EngineersProject # 30608504 ⁵⁵¹Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____Tracking #: NACustody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____Thermometer Used 5 6 7Type of Ice: Wet Blue None☒ Samples on ice, cooling process has begunCooler Temperature 0.9

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: AS 4/27/12

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>SL</u>	
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed <u>AD</u> Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 5-1/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

May 31, 2012

Jason McCabe
Rhea Engineers & Consultants, Inc.
4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044

RE: Project: 911TH AWA T-RAMP
Pace Project No.: 3066909

Dear Jason McCabe:

Enclosed are the analytical results for sample(s) received by the laboratory between April 04, 2012 and April 06, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This project was revised on 5/31/12 in order to report the data in CLP format.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Timothy Reed

timothy.reed@pacelabs.com
Project Manager

Enclosures

cc: Erica DeLattre, Rhea Engineers & Consultants, Inc.
Dan DePra, CDM Smith



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

CERTIFICATIONS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601

ACLASS DOD-ELAP Accreditation #: ADE-1544

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California/TNI Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

Delaware Certification

Florida/TNI Certification #: E87683

Guam/PADEP Certification

Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification

Indiana/PADEP Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana/TNI Certification #: LA080002

Louisiana/TNI Certification #: 4086

Maine Certification #: PA0091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188

Utah/TNI Certification #: ANTE

Virgin Island/PADEP Certification

Virginia Certification #: 00112

Virginia VELAP (Cert # 460198)

Washington Certification #: C868

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

Page 2 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE SUMMARY

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3066909001	TRAMP-J1-S-2-4	Solid	04/02/12 11:11	04/04/12 16:40
3066909002	TRAMP-F1-S-4-6	Solid	04/02/12 14:10	04/04/12 16:40
3066909003	TRAMP-L4-S-22-24	Solid	04/03/12 10:42	04/04/12 16:40
3066909004	TRAMP-G3-S-9.5-11.5	Solid	04/03/12 13:13	04/04/12 16:40
3066909005	TRAMP-D3-S-4-6	Solid	04/04/12 10:10	04/06/12 10:00
3066909006	TRAMP-C4-S-4-6	Solid	04/04/12 12:22	04/06/12 10:00
3066909007	TRAMP-A5-S-2-4	Solid	04/05/12 09:55	04/06/12 10:00
3066909008	TRAMP-A8-S-4-6	Solid	04/05/12 13:35	04/06/12 10:00
3066909009	TRAMP-A7-S-2-4	Solid	04/05/12 11:40	04/06/12 10:00
3066909010	Duplicate 1	Solid	04/05/12 00:01	04/06/12 10:00

REPORT OF LABORATORY ANALYSIS

Page 3 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE ANALYTE COUNT

Project: 911TH AWA T-RAMP
Pace Project No.: 3066909

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3066909001	TRAMP-J1-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3066909002	TRAMP-F1-S-4-6	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3066909003	TRAMP-L4-S-22-24	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3066909004	TRAMP-G3-S-9.5-11.5	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3066909005	TRAMP-D3-S-4-6	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3066909006	TRAMP-C4-S-4-6	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3066909007	TRAMP-A5-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3066909008	TRAMP-A8-S-4-6	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3066909009	TRAMP-A7-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3066909010	Duplicate 1	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1

REPORT OF LABORATORY ANALYSIS

Page 4 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Method: EPA 6010B

Description: 6010 MET ICP

Client: CDM Smith

Date: May 31, 2012

General Information:

10 samples were analyzed for EPA 6010B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 5 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Method: EPA 8260

Description: 8260 MSV 5030 Low Level

Client: CDM Smith

Date: May 31, 2012

General Information:

10 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/12486

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 6 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-J1-S-2-4 **Lab ID: 3066909001** Collected: 04/02/12 11:11 Received: 04/04/12 16:40 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	19.6	mg/kg	0.54	0.46	1	04/11/12 10:35	04/12/12 09:46	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	65.2	ug/kg	9.6	1.9	1		04/12/12 13:42	67-64-1	
Benzene	0.75U	ug/kg	4.8	0.75	1		04/12/12 13:42	71-43-2	
Bromodichloromethane	1.7U	ug/kg	4.8	1.7	1		04/12/12 13:42	75-27-4	
Bromoform	2.4U	ug/kg	4.8	2.4	1		04/12/12 13:42	75-25-2	
Bromomethane	2.8U	ug/kg	4.8	2.8	1		04/12/12 13:42	74-83-9	
TOTAL BTEX	6.8U	ug/kg	28.7	6.8	1		04/12/12 13:42		
2-Butanone (MEK)	8.4J	ug/kg	9.6	1.2	1		04/12/12 13:42	78-93-3	
Carbon disulfide	2.6J	ug/kg	4.8	0.73	1		04/12/12 13:42	75-15-0	
Carbon tetrachloride	0.85U	ug/kg	4.8	0.85	1		04/12/12 13:42	56-23-5	
Chlorobenzene	0.95U	ug/kg	4.8	0.95	1		04/12/12 13:42	108-90-7	
Chloroethane	1.6U	ug/kg	4.8	1.6	1		04/12/12 13:42	75-00-3	
Chloroform	0.68U	ug/kg	4.8	0.68	1		04/12/12 13:42	67-66-3	
Chloromethane	1.0U	ug/kg	4.8	1.0	1		04/12/12 13:42	74-87-3	
Dibromochloromethane	1.5U	ug/kg	4.8	1.5	1		04/12/12 13:42	124-48-1	
1,2-Dibromoethane (EDB)	2.5U	ug/kg	4.8	2.5	1		04/12/12 13:42	106-93-4	
1,2-Dichlorobenzene	1.0U	ug/kg	4.8	1.0	1		04/12/12 13:42	95-50-1	
1,3-Dichlorobenzene	1.2U	ug/kg	4.8	1.2	1		04/12/12 13:42	541-73-1	
1,4-Dichlorobenzene	1.2U	ug/kg	4.8	1.2	1		04/12/12 13:42	106-46-7	
1,1-Dichloroethane	0.76U	ug/kg	4.8	0.76	1		04/12/12 13:42	75-34-3	
1,2-Dichloroethane	0.87U	ug/kg	4.8	0.87	1		04/12/12 13:42	107-06-2	
1,2-Dichloroethene (Total)	3.1U	ug/kg	9.6	3.1	1		04/12/12 13:42	540-59-0	
1,1-Dichloroethene	0.78U	ug/kg	4.8	0.78	1		04/12/12 13:42	75-35-4	
cis-1,2-Dichloroethene	2.4U	ug/kg	4.8	2.4	1		04/12/12 13:42	156-59-2	
trans-1,2-Dichloroethene	0.78U	ug/kg	4.8	0.78	1		04/12/12 13:42	156-60-5	
1,2-Dichloropropane	1.6U	ug/kg	4.8	1.6	1		04/12/12 13:42	78-87-5	
cis-1,3-Dichloropropene	1.5U	ug/kg	4.8	1.5	1		04/12/12 13:42	10061-01-5	
trans-1,3-Dichloropropene	1.6U	ug/kg	4.8	1.6	1		04/12/12 13:42	10061-02-6	
Ethylbenzene	2.5U	ug/kg	4.8	2.5	1		04/12/12 13:42	100-41-4	
2-Hexanone	1.1U	ug/kg	9.6	1.1	1		04/12/12 13:42	591-78-6	
Isopropylbenzene (Cumene)	1.0U	ug/kg	4.8	1.0	1		04/12/12 13:42	98-82-8	
Methylene Chloride	1.3U	ug/kg	4.8	1.3	1		04/12/12 13:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.99U	ug/kg	9.6	0.99	1		04/12/12 13:42	108-10-1	
Methyl-tert-butyl ether	0.75J	ug/kg	4.8	0.68	1		04/12/12 13:42	1634-04-4	
Naphthalene	2.4U	ug/kg	4.8	2.4	1		04/12/12 13:42	91-20-3	
Styrene	1.1U	ug/kg	4.8	1.1	1		04/12/12 13:42	100-42-5	
1,1,2,2-Tetrachloroethane	0.85U	ug/kg	4.8	0.85	1		04/12/12 13:42	79-34-5	
Tetrachloroethene	0.70U	ug/kg	4.8	0.70	1		04/12/12 13:42	127-18-4	
Toluene	0.62U	ug/kg	4.8	0.62	1		04/12/12 13:42	108-88-3	
1,1,1-Trichloroethane	2.5U	ug/kg	4.8	2.5	1		04/12/12 13:42	71-55-6	
1,1,2-Trichloroethane	0.88U	ug/kg	4.8	0.88	1		04/12/12 13:42	79-00-5	
Trichloroethene	0.72U	ug/kg	4.8	0.72	1		04/12/12 13:42	79-01-6	
1,2,4-Trimethylbenzene	1.1U	ug/kg	4.8	1.1	1		04/12/12 13:42	95-63-6	

Date: 05/31/2012 11:23 AM

REPORT OF LABORATORY ANALYSIS

Page 7 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-J1-S-2-4 **Lab ID: 3066909001** Collected: 04/02/12 11:11 Received: 04/04/12 16:40 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	1.3U	ug/kg	4.8	1.3	1		04/12/12 13:42	108-67-8	
Vinyl chloride	0.77U	ug/kg	4.8	0.77	1		04/12/12 13:42	75-01-4	
Xylene (Total)	2.9U	ug/kg	14.4	2.9	1		04/12/12 13:42	1330-20-7	
m&p-Xylene	1.8U	ug/kg	9.6	1.8	1		04/12/12 13:42	179601-23-1	
o-Xylene	1.1U	ug/kg	4.8	1.1	1		04/12/12 13:42	95-47-6	
Surrogates									
Toluene-d8 (S)	94	%	70-130		1		04/12/12 13:42	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		04/12/12 13:42	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		04/12/12 13:42	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87							
Percent Moisture	13.4	%	0.10	0.10	1		04/19/12 14:32		

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-F1-S-4-6 **Lab ID: 3066909002** Collected: 04/02/12 14:10 Received: 04/04/12 16:40 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	30.9	mg/kg	0.34	0.29	1	04/11/12 10:35	04/12/12 09:56	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	22.3	ug/kg	9.7	1.9	1		04/12/12 14:05	67-64-1	
Benzene	2.5J	ug/kg	4.9	0.76	1		04/12/12 14:05	71-43-2	
Bromodichloromethane	1.8U	ug/kg	4.9	1.8	1		04/12/12 14:05	75-27-4	
Bromoform	2.5U	ug/kg	4.9	2.5	1		04/12/12 14:05	75-25-2	
Bromomethane	2.9U	ug/kg	4.9	2.9	1		04/12/12 14:05	74-83-9	
TOTAL BTEX	6.9U	ug/kg	29.2	6.9	1		04/12/12 14:05		
2-Butanone (MEK)	3.9J	ug/kg	9.7	1.2	1		04/12/12 14:05	78-93-3	
Carbon disulfide	1.5J	ug/kg	4.9	0.75	1		04/12/12 14:05	75-15-0	
Carbon tetrachloride	0.87U	ug/kg	4.9	0.87	1		04/12/12 14:05	56-23-5	
Chlorobenzene	0.96U	ug/kg	4.9	0.96	1		04/12/12 14:05	108-90-7	
Chloroethane	1.6U	ug/kg	4.9	1.6	1		04/12/12 14:05	75-00-3	
Chloroform	0.69U	ug/kg	4.9	0.69	1		04/12/12 14:05	67-66-3	
Chloromethane	1.0U	ug/kg	4.9	1.0	1		04/12/12 14:05	74-87-3	
Dibromochloromethane	1.5U	ug/kg	4.9	1.5	1		04/12/12 14:05	124-48-1	
1,2-Dibromoethane (EDB)	2.5U	ug/kg	4.9	2.5	1		04/12/12 14:05	106-93-4	
1,2-Dichlorobenzene	1.1U	ug/kg	4.9	1.1	1		04/12/12 14:05	95-50-1	
1,3-Dichlorobenzene	1.2U	ug/kg	4.9	1.2	1		04/12/12 14:05	541-73-1	
1,4-Dichlorobenzene	1.2U	ug/kg	4.9	1.2	1		04/12/12 14:05	106-46-7	
1,1-Dichloroethane	0.77U	ug/kg	4.9	0.77	1		04/12/12 14:05	75-34-3	
1,2-Dichloroethane	0.89U	ug/kg	4.9	0.89	1		04/12/12 14:05	107-06-2	
1,2-Dichloroethene (Total)	3.2U	ug/kg	9.7	3.2	1		04/12/12 14:05	540-59-0	
1,1-Dichloroethene	0.79U	ug/kg	4.9	0.79	1		04/12/12 14:05	75-35-4	
cis-1,2-Dichloroethene	2.4U	ug/kg	4.9	2.4	1		04/12/12 14:05	156-59-2	
trans-1,2-Dichloroethene	0.80U	ug/kg	4.9	0.80	1		04/12/12 14:05	156-60-5	
1,2-Dichloropropane	1.6U	ug/kg	4.9	1.6	1		04/12/12 14:05	78-87-5	
cis-1,3-Dichloropropene	1.5U	ug/kg	4.9	1.5	1		04/12/12 14:05	10061-01-5	
trans-1,3-Dichloropropene	1.6U	ug/kg	4.9	1.6	1		04/12/12 14:05	10061-02-6	
Ethylbenzene	2.5U	ug/kg	4.9	2.5	1		04/12/12 14:05	100-41-4	
2-Hexanone	1.1U	ug/kg	9.7	1.1	1		04/12/12 14:05	591-78-6	
Isopropylbenzene (Cumene)	1.0U	ug/kg	4.9	1.0	1		04/12/12 14:05	98-82-8	
Methylene Chloride	1.3U	ug/kg	4.9	1.3	1		04/12/12 14:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	1.0U	ug/kg	9.7	1.0	1		04/12/12 14:05	108-10-1	
Methyl-tert-butyl ether	0.69U	ug/kg	4.9	0.69	1		04/12/12 14:05	1634-04-4	
Naphthalene	2.5U	ug/kg	4.9	2.5	1		04/12/12 14:05	91-20-3	
Styrene	1.1U	ug/kg	4.9	1.1	1		04/12/12 14:05	100-42-5	
1,1,2,2-Tetrachloroethane	0.86U	ug/kg	4.9	0.86	1		04/12/12 14:05	79-34-5	
Tetrachloroethene	0.71U	ug/kg	4.9	0.71	1		04/12/12 14:05	127-18-4	
Toluene	2.6J	ug/kg	4.9	0.63	1		04/12/12 14:05	108-88-3	
1,1,1-Trichloroethane	2.5U	ug/kg	4.9	2.5	1		04/12/12 14:05	71-55-6	
1,1,2-Trichloroethane	0.90U	ug/kg	4.9	0.90	1		04/12/12 14:05	79-00-5	
Trichloroethene	0.74U	ug/kg	4.9	0.74	1		04/12/12 14:05	79-01-6	
1,2,4-Trimethylbenzene	1.1U	ug/kg	4.9	1.1	1		04/12/12 14:05	95-63-6	

Date: 05/31/2012 11:23 AM

REPORT OF LABORATORY ANALYSIS

Page 9 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-F1-S-4-6 **Lab ID: 3066909002** Collected: 04/02/12 14:10 Received: 04/04/12 16:40 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	1.3U	ug/kg	4.9	1.3	1		04/12/12 14:05	108-67-8	
Vinyl chloride	0.79U	ug/kg	4.9	0.79	1		04/12/12 14:05	75-01-4	
Xylene (Total)	3.0U	ug/kg	14.6	3.0	1		04/12/12 14:05	1330-20-7	
m&p-Xylene	1.9U	ug/kg	9.7	1.9	1		04/12/12 14:05	179601-23-1	
o-Xylene	1.1U	ug/kg	4.9	1.1	1		04/12/12 14:05	95-47-6	
Surrogates									
Toluene-d8 (S)	95	%	70-130		1		04/12/12 14:05	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		1		04/12/12 14:05	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		04/12/12 14:05	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87							
Percent Moisture	11.2	%	0.10	0.10	1		04/19/12 14:32		

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-L4-S-22-24 **Lab ID: 3066909003** Collected: 04/03/12 10:42 Received: 04/04/12 16:40 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	25.5	mg/kg	0.57	0.48	1	04/11/12 10:35	04/12/12 09:59	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	20.4	ug/kg	10.7	2.1	1		04/12/12 14:29	67-64-1	
Benzene	0.84U	ug/kg	5.4	0.84	1		04/12/12 14:29	71-43-2	
Bromodichloromethane	1.9U	ug/kg	5.4	1.9	1		04/12/12 14:29	75-27-4	
Bromoform	2.7U	ug/kg	5.4	2.7	1		04/12/12 14:29	75-25-2	
Bromomethane	3.2U	ug/kg	5.4	3.2	1		04/12/12 14:29	74-83-9	
TOTAL BTEX	7.6U	ug/kg	32.2	7.6	1		04/12/12 14:29		
2-Butanone (MEK)	4.0J	ug/kg	10.7	1.4	1		04/12/12 14:29	78-93-3	
Carbon disulfide	3.4J	ug/kg	5.4	0.82	1		04/12/12 14:29	75-15-0	
Carbon tetrachloride	0.95U	ug/kg	5.4	0.95	1		04/12/12 14:29	56-23-5	
Chlorobenzene	1.1U	ug/kg	5.4	1.1	1		04/12/12 14:29	108-90-7	
Chloroethane	1.7U	ug/kg	5.4	1.7	1		04/12/12 14:29	75-00-3	
Chloroform	0.76U	ug/kg	5.4	0.76	1		04/12/12 14:29	67-66-3	
Chloromethane	1.1U	ug/kg	5.4	1.1	1		04/12/12 14:29	74-87-3	
Dibromochloromethane	1.6U	ug/kg	5.4	1.6	1		04/12/12 14:29	124-48-1	
1,2-Dibromoethane (EDB)	2.8U	ug/kg	5.4	2.8	1		04/12/12 14:29	106-93-4	
1,2-Dichlorobenzene	1.2U	ug/kg	5.4	1.2	1		04/12/12 14:29	95-50-1	
1,3-Dichlorobenzene	1.4U	ug/kg	5.4	1.4	1		04/12/12 14:29	541-73-1	
1,4-Dichlorobenzene	1.3U	ug/kg	5.4	1.3	1		04/12/12 14:29	106-46-7	
1,1-Dichloroethane	0.85U	ug/kg	5.4	0.85	1		04/12/12 14:29	75-34-3	
1,2-Dichloroethane	0.98U	ug/kg	5.4	0.98	1		04/12/12 14:29	107-06-2	
1,2-Dichloroethene (Total)	3.5U	ug/kg	10.7	3.5	1		04/12/12 14:29	540-59-0	
1,1-Dichloroethene	0.87U	ug/kg	5.4	0.87	1		04/12/12 14:29	75-35-4	
cis-1,2-Dichloroethene	2.6U	ug/kg	5.4	2.6	1		04/12/12 14:29	156-59-2	
trans-1,2-Dichloroethene	0.88U	ug/kg	5.4	0.88	1		04/12/12 14:29	156-60-5	
1,2-Dichloropropane	1.7U	ug/kg	5.4	1.7	1		04/12/12 14:29	78-87-5	
cis-1,3-Dichloropropene	1.7U	ug/kg	5.4	1.7	1		04/12/12 14:29	10061-01-5	
trans-1,3-Dichloropropene	1.7U	ug/kg	5.4	1.7	1		04/12/12 14:29	10061-02-6	
Ethylbenzene	2.8U	ug/kg	5.4	2.8	1		04/12/12 14:29	100-41-4	
2-Hexanone	1.3U	ug/kg	10.7	1.3	1		04/12/12 14:29	591-78-6	
Isopropylbenzene (Cumene)	1.1U	ug/kg	5.4	1.1	1		04/12/12 14:29	98-82-8	
Methylene Chloride	1.4U	ug/kg	5.4	1.4	1		04/12/12 14:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	1.1U	ug/kg	10.7	1.1	1		04/12/12 14:29	108-10-1	
Methyl-tert-butyl ether	0.76U	ug/kg	5.4	0.76	1		04/12/12 14:29	1634-04-4	
Naphthalene	2.7U	ug/kg	5.4	2.7	1		04/12/12 14:29	91-20-3	
Styrene	1.2U	ug/kg	5.4	1.2	1		04/12/12 14:29	100-42-5	
1,1,2,2-Tetrachloroethane	0.95U	ug/kg	5.4	0.95	1		04/12/12 14:29	79-34-5	
Tetrachloroethene	0.78U	ug/kg	5.4	0.78	1		04/12/12 14:29	127-18-4	
Toluene	0.69U	ug/kg	5.4	0.69	1		04/12/12 14:29	108-88-3	
1,1,1-Trichloroethane	2.8U	ug/kg	5.4	2.8	1		04/12/12 14:29	71-55-6	
1,1,2-Trichloroethane	0.99U	ug/kg	5.4	0.99	1		04/12/12 14:29	79-00-5	
Trichloroethene	0.81U	ug/kg	5.4	0.81	1		04/12/12 14:29	79-01-6	
1,2,4-Trimethylbenzene	1.2U	ug/kg	5.4	1.2	1		04/12/12 14:29	95-63-6	

Date: 05/31/2012 11:23 AM

REPORT OF LABORATORY ANALYSIS

Page 11 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-L4-S-22-24 **Lab ID: 3066909003** Collected: 04/03/12 10:42 Received: 04/04/12 16:40 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	1.4U	ug/kg	5.4	1.4	1		04/12/12 14:29	108-67-8	
Vinyl chloride	0.87U	ug/kg	5.4	0.87	1		04/12/12 14:29	75-01-4	
Xylene (Total)	3.3U	ug/kg	16.1	3.3	1		04/12/12 14:29	1330-20-7	
m&p-Xylene	2.1U	ug/kg	10.7	2.1	1		04/12/12 14:29	179601-23-1	
o-Xylene	1.2U	ug/kg	5.4	1.2	1		04/12/12 14:29	95-47-6	
Surrogates									
Toluene-d8 (S)	93	%	70-130		1		04/12/12 14:29	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		04/12/12 14:29	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		04/12/12 14:29	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87							
Percent Moisture	21.8	%	0.10	0.10	1		04/19/12 14:33		

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-G3-S-9.5-11.5 **Lab ID: 3066909004** Collected: 04/03/12 13:13 Received: 04/04/12 16:40 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	18.3	mg/kg	0.42	0.35	1	04/11/12 10:35	04/12/12 10:02	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	62.9	ug/kg	10.2	2.0	1		04/12/12 14:52	67-64-1	
Benzene	0.80U	ug/kg	5.1	0.80	1		04/12/12 14:52	71-43-2	
Bromodichloromethane	1.8U	ug/kg	5.1	1.8	1		04/12/12 14:52	75-27-4	
Bromoform	2.6U	ug/kg	5.1	2.6	1		04/12/12 14:52	75-25-2	
Bromomethane	3.0U	ug/kg	5.1	3.0	1		04/12/12 14:52	74-83-9	
TOTAL BTEX	7.2U	ug/kg	30.7	7.2	1		04/12/12 14:52		
2-Butanone (MEK)	11.9	ug/kg	10.2	1.3	1		04/12/12 14:52	78-93-3	
Carbon disulfide	2.9J	ug/kg	5.1	0.78	1		04/12/12 14:52	75-15-0	
Carbon tetrachloride	0.91U	ug/kg	5.1	0.91	1		04/12/12 14:52	56-23-5	
Chlorobenzene	1.0U	ug/kg	5.1	1.0	1		04/12/12 14:52	108-90-7	
Chloroethane	1.7U	ug/kg	5.1	1.7	1		04/12/12 14:52	75-00-3	
Chloroform	0.73U	ug/kg	5.1	0.73	1		04/12/12 14:52	67-66-3	
Chloromethane	1.1U	ug/kg	5.1	1.1	1		04/12/12 14:52	74-87-3	
Dibromochloromethane	1.6U	ug/kg	5.1	1.6	1		04/12/12 14:52	124-48-1	
1,2-Dibromoethane (EDB)	2.7U	ug/kg	5.1	2.7	1		04/12/12 14:52	106-93-4	
1,2-Dichlorobenzene	1.1U	ug/kg	5.1	1.1	1		04/12/12 14:52	95-50-1	
1,3-Dichlorobenzene	1.3U	ug/kg	5.1	1.3	1		04/12/12 14:52	541-73-1	
1,4-Dichlorobenzene	1.2U	ug/kg	5.1	1.2	1		04/12/12 14:52	106-46-7	
1,1-Dichloroethane	0.81U	ug/kg	5.1	0.81	1		04/12/12 14:52	75-34-3	
1,2-Dichloroethane	0.93U	ug/kg	5.1	0.93	1		04/12/12 14:52	107-06-2	
1,2-Dichloroethene (Total)	3.4U	ug/kg	10.2	3.4	1		04/12/12 14:52	540-59-0	
1,1-Dichloroethene	0.83U	ug/kg	5.1	0.83	1		04/12/12 14:52	75-35-4	
cis-1,2-Dichloroethene	2.5U	ug/kg	5.1	2.5	1		04/12/12 14:52	156-59-2	
trans-1,2-Dichloroethene	0.84U	ug/kg	5.1	0.84	1		04/12/12 14:52	156-60-5	
1,2-Dichloropropane	1.7U	ug/kg	5.1	1.7	1		04/12/12 14:52	78-87-5	
cis-1,3-Dichloropropene	1.6U	ug/kg	5.1	1.6	1		04/12/12 14:52	10061-01-5	
trans-1,3-Dichloropropene	1.7U	ug/kg	5.1	1.7	1		04/12/12 14:52	10061-02-6	
Ethylbenzene	2.6U	ug/kg	5.1	2.6	1		04/12/12 14:52	100-41-4	
2-Hexanone	1.2U	ug/kg	10.2	1.2	1		04/12/12 14:52	591-78-6	
Isopropylbenzene (Cumene)	1.1U	ug/kg	5.1	1.1	1		04/12/12 14:52	98-82-8	
Methylene Chloride	1.4U	ug/kg	5.1	1.4	1		04/12/12 14:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	1.1U	ug/kg	10.2	1.1	1		04/12/12 14:52	108-10-1	
Methyl-tert-butyl ether	0.73U	ug/kg	5.1	0.73	1		04/12/12 14:52	1634-04-4	
Naphthalene	2.6U	ug/kg	5.1	2.6	1		04/12/12 14:52	91-20-3	
Styrene	1.1U	ug/kg	5.1	1.1	1		04/12/12 14:52	100-42-5	
1,1,2,2-Tetrachloroethane	0.91U	ug/kg	5.1	0.91	1		04/12/12 14:52	79-34-5	
Tetrachloroethene	0.74U	ug/kg	5.1	0.74	1		04/12/12 14:52	127-18-4	
Toluene	0.66U	ug/kg	5.1	0.66	1		04/12/12 14:52	108-88-3	
1,1,1-Trichloroethane	2.7U	ug/kg	5.1	2.7	1		04/12/12 14:52	71-55-6	
1,1,2-Trichloroethane	0.94U	ug/kg	5.1	0.94	1		04/12/12 14:52	79-00-5	
Trichloroethene	0.77U	ug/kg	5.1	0.77	1		04/12/12 14:52	79-01-6	
1,2,4-Trimethylbenzene	1.2U	ug/kg	5.1	1.2	1		04/12/12 14:52	95-63-6	

Date: 05/31/2012 11:23 AM

REPORT OF LABORATORY ANALYSIS

Page 13 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-G3-S-9.5-11.5 **Lab ID: 3066909004** Collected: 04/03/12 13:13 Received: 04/04/12 16:40 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	1.4U	ug/kg	5.1	1.4	1		04/12/12 14:52	108-67-8	
Vinyl chloride	0.83U	ug/kg	5.1	0.83	1		04/12/12 14:52	75-01-4	
Xylene (Total)	3.1U	ug/kg	15.3	3.1	1		04/12/12 14:52	1330-20-7	
m&p-Xylene	2.0U	ug/kg	10.2	2.0	1		04/12/12 14:52	179601-23-1	
o-Xylene	1.2U	ug/kg	5.1	1.2	1		04/12/12 14:52	95-47-6	
Surrogates									
Toluene-d8 (S)	95	%	70-130		1		04/12/12 14:52	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		04/12/12 14:52	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		04/12/12 14:52	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87							
Percent Moisture	22.8	%	0.10	0.10	1		04/19/12 14:33		

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-D3-S-4-6 **Lab ID: 3066909005** Collected: 04/04/12 10:10 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	14.8	mg/kg	0.45	0.38	1	04/11/12 10:35	04/12/12 10:05	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	6.0J	ug/kg	12.9	2.5	1		04/12/12 15:15	67-64-1	
Benzene	34.0	ug/kg	6.5	1.0	1		04/12/12 15:15	71-43-2	
Bromodichloromethane	2.3U	ug/kg	6.5	2.3	1		04/12/12 15:15	75-27-4	
Bromoform	3.3U	ug/kg	6.5	3.3	1		04/12/12 15:15	75-25-2	
Bromomethane	3.8U	ug/kg	6.5	3.8	1		04/12/12 15:15	74-83-9	
TOTAL BTEX	43.7	ug/kg	38.7	9.1	1		04/12/12 15:15		
2-Butanone (MEK)	9.7J	ug/kg	12.9	1.6	1		04/12/12 15:15	78-93-3	
Carbon disulfide	0.99U	ug/kg	6.5	0.99	1		04/12/12 15:15	75-15-0	
Carbon tetrachloride	1.1U	ug/kg	6.5	1.1	1		04/12/12 15:15	56-23-5	
Chlorobenzene	1.3U	ug/kg	6.5	1.3	1		04/12/12 15:15	108-90-7	
Chloroethane	2.1U	ug/kg	6.5	2.1	1		04/12/12 15:15	75-00-3	
Chloroform	0.92U	ug/kg	6.5	0.92	1		04/12/12 15:15	67-66-3	
Chloromethane	1.4U	ug/kg	6.5	1.4	1		04/12/12 15:15	74-87-3	
Dibromochloromethane	2.0U	ug/kg	6.5	2.0	1		04/12/12 15:15	124-48-1	
1,2-Dibromoethane (EDB)	3.4U	ug/kg	6.5	3.4	1		04/12/12 15:15	106-93-4	
1,2-Dichlorobenzene	1.4U	ug/kg	6.5	1.4	1		04/12/12 15:15	95-50-1	
1,3-Dichlorobenzene	1.6U	ug/kg	6.5	1.6	1		04/12/12 15:15	541-73-1	
1,4-Dichlorobenzene	1.6U	ug/kg	6.5	1.6	1		04/12/12 15:15	106-46-7	
1,1-Dichloroethane	1.0U	ug/kg	6.5	1.0	1		04/12/12 15:15	75-34-3	
1,2-Dichloroethane	1.2U	ug/kg	6.5	1.2	1		04/12/12 15:15	107-06-2	
1,2-Dichloroethene (Total)	4.2U	ug/kg	12.9	4.2	1		04/12/12 15:15	540-59-0	
1,1-Dichloroethene	1.0U	ug/kg	6.5	1.0	1		04/12/12 15:15	75-35-4	
cis-1,2-Dichloroethene	3.2U	ug/kg	6.5	3.2	1		04/12/12 15:15	156-59-2	
trans-1,2-Dichloroethene	1.1U	ug/kg	6.5	1.1	1		04/12/12 15:15	156-60-5	
1,2-Dichloropropane	2.1U	ug/kg	6.5	2.1	1		04/12/12 15:15	78-87-5	
cis-1,3-Dichloropropene	2.0U	ug/kg	6.5	2.0	1		04/12/12 15:15	10061-01-5	
trans-1,3-Dichloropropene	2.1U	ug/kg	6.5	2.1	1		04/12/12 15:15	10061-02-6	
Ethylbenzene	3.3U	ug/kg	6.5	3.3	1		04/12/12 15:15	100-41-4	
2-Hexanone	1.5U	ug/kg	12.9	1.5	1		04/12/12 15:15	591-78-6	
Isopropylbenzene (Cumene)	1.4U	ug/kg	6.5	1.4	1		04/12/12 15:15	98-82-8	
Methylene Chloride	1.7U	ug/kg	6.5	1.7	1		04/12/12 15:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	1.3U	ug/kg	12.9	1.3	1		04/12/12 15:15	108-10-1	
Methyl-tert-butyl ether	0.92U	ug/kg	6.5	0.92	1		04/12/12 15:15	1634-04-4	
Naphthalene	3.3U	ug/kg	6.5	3.3	1		04/12/12 15:15	91-20-3	
Styrene	1.4U	ug/kg	6.5	1.4	1		04/12/12 15:15	100-42-5	
1,1,2,2-Tetrachloroethane	1.1U	ug/kg	6.5	1.1	1		04/12/12 15:15	79-34-5	
Tetrachloroethene	0.94U	ug/kg	6.5	0.94	1		04/12/12 15:15	127-18-4	
Toluene	9.7	ug/kg	6.5	0.83	1		04/12/12 15:15	108-88-3	
1,1,1-Trichloroethane	3.4U	ug/kg	6.5	3.4	1		04/12/12 15:15	71-55-6	
1,1,2-Trichloroethane	1.2U	ug/kg	6.5	1.2	1		04/12/12 15:15	79-00-5	
Trichloroethene	0.98U	ug/kg	6.5	0.98	1		04/12/12 15:15	79-01-6	
1,2,4-Trimethylbenzene	1.5U	ug/kg	6.5	1.5	1		04/12/12 15:15	95-63-6	

Date: 05/31/2012 11:23 AM

REPORT OF LABORATORY ANALYSIS

Page 15 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-D3-S-4-6 **Lab ID: 3066909005** Collected: 04/04/12 10:10 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	1.7U	ug/kg	6.5	1.7	1		04/12/12 15:15	108-67-8	
Vinyl chloride	1.0U	ug/kg	6.5	1.0	1		04/12/12 15:15	75-01-4	
Xylene (Total)	3.9U	ug/kg	19.4	3.9	1		04/12/12 15:15	1330-20-7	
m&p-Xylene	2.5U	ug/kg	12.9	2.5	1		04/12/12 15:15	179601-23-1	
o-Xylene	1.5U	ug/kg	6.5	1.5	1		04/12/12 15:15	95-47-6	
Surrogates									
Toluene-d8 (S)	93	%	70-130		1		04/12/12 15:15	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		04/12/12 15:15	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		04/12/12 15:15	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87							
Percent Moisture	4.1	%	0.10	0.10	1		04/19/12 14:33		

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-C4-S-4-6 **Lab ID: 3066909006** Collected: 04/04/12 12:22 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	13.1	mg/kg	0.37	0.31	1	04/11/12 10:35	04/12/12 10:08	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	2.0J	ug/kg	9.0	1.8	1		04/12/12 15:38	67-64-1	
Benzene	1.7J	ug/kg	4.5	0.70	1		04/12/12 15:38	71-43-2	
Bromodichloromethane	1.6U	ug/kg	4.5	1.6	1		04/12/12 15:38	75-27-4	
Bromoform	2.3U	ug/kg	4.5	2.3	1		04/12/12 15:38	75-25-2	
Bromomethane	2.6U	ug/kg	4.5	2.6	1		04/12/12 15:38	74-83-9	
TOTAL BTEX	6.3U	ug/kg	27.0	6.3	1		04/12/12 15:38		
2-Butanone (MEK)	1.1U	ug/kg	9.0	1.1	1		04/12/12 15:38	78-93-3	
Carbon disulfide	11.5	ug/kg	4.5	0.69	1		04/12/12 15:38	75-15-0	
Carbon tetrachloride	0.80U	ug/kg	4.5	0.80	1		04/12/12 15:38	56-23-5	
Chlorobenzene	0.89U	ug/kg	4.5	0.89	1		04/12/12 15:38	108-90-7	
Chloroethane	1.5U	ug/kg	4.5	1.5	1		04/12/12 15:38	75-00-3	
Chloroform	0.64U	ug/kg	4.5	0.64	1		04/12/12 15:38	67-66-3	
Chloromethane	0.94U	ug/kg	4.5	0.94	1		04/12/12 15:38	74-87-3	
Dibromochloromethane	1.4U	ug/kg	4.5	1.4	1		04/12/12 15:38	124-48-1	
1,2-Dibromoethane (EDB)	2.3U	ug/kg	4.5	2.3	1		04/12/12 15:38	106-93-4	
1,2-Dichlorobenzene	0.98U	ug/kg	4.5	0.98	1		04/12/12 15:38	95-50-1	
1,3-Dichlorobenzene	1.1U	ug/kg	4.5	1.1	1		04/12/12 15:38	541-73-1	
1,4-Dichlorobenzene	1.1U	ug/kg	4.5	1.1	1		04/12/12 15:38	106-46-7	
1,1-Dichloroethane	0.71U	ug/kg	4.5	0.71	1		04/12/12 15:38	75-34-3	
1,2-Dichloroethane	0.82U	ug/kg	4.5	0.82	1		04/12/12 15:38	107-06-2	
1,2-Dichloroethene (Total)	3.0U	ug/kg	9.0	3.0	1		04/12/12 15:38	540-59-0	
1,1-Dichloroethene	0.73U	ug/kg	4.5	0.73	1		04/12/12 15:38	75-35-4	
cis-1,2-Dichloroethene	2.2U	ug/kg	4.5	2.2	1		04/12/12 15:38	156-59-2	
trans-1,2-Dichloroethene	0.74U	ug/kg	4.5	0.74	1		04/12/12 15:38	156-60-5	
1,2-Dichloropropane	1.5U	ug/kg	4.5	1.5	1		04/12/12 15:38	78-87-5	
cis-1,3-Dichloropropene	1.4U	ug/kg	4.5	1.4	1		04/12/12 15:38	10061-01-5	
trans-1,3-Dichloropropene	1.5U	ug/kg	4.5	1.5	1		04/12/12 15:38	10061-02-6	
Ethylbenzene	2.3U	ug/kg	4.5	2.3	1		04/12/12 15:38	100-41-4	
2-Hexanone	1.1U	ug/kg	9.0	1.1	1		04/12/12 15:38	591-78-6	
Isopropylbenzene (Cumene)	0.95U	ug/kg	4.5	0.95	1		04/12/12 15:38	98-82-8	
Methylene Chloride	1.2U	ug/kg	4.5	1.2	1		04/12/12 15:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.93U	ug/kg	9.0	0.93	1		04/12/12 15:38	108-10-1	
Methyl-tert-butyl ether	0.64U	ug/kg	4.5	0.64	1		04/12/12 15:38	1634-04-4	
Naphthalene	2.3U	ug/kg	4.5	2.3	1		04/12/12 15:38	91-20-3	
Styrene	1.0U	ug/kg	4.5	1.0	1		04/12/12 15:38	100-42-5	
1,1,2,2-Tetrachloroethane	0.80U	ug/kg	4.5	0.80	1		04/12/12 15:38	79-34-5	
Tetrachloroethene	0.65U	ug/kg	4.5	0.65	1		04/12/12 15:38	127-18-4	
Toluene	0.81J	ug/kg	4.5	0.58	1		04/12/12 15:38	108-88-3	
1,1,1-Trichloroethane	2.3U	ug/kg	4.5	2.3	1		04/12/12 15:38	71-55-6	
1,1,2-Trichloroethane	0.83U	ug/kg	4.5	0.83	1		04/12/12 15:38	79-00-5	
Trichloroethene	0.68U	ug/kg	4.5	0.68	1		04/12/12 15:38	79-01-6	
1,2,4-Trimethylbenzene	1.0U	ug/kg	4.5	1.0	1		04/12/12 15:38	95-63-6	

Date: 05/31/2012 11:23 AM

REPORT OF LABORATORY ANALYSIS

Page 17 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-C4-S-4-6 **Lab ID: 3066909006** Collected: 04/04/12 12:22 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	1.2U	ug/kg	4.5	1.2	1		04/12/12 15:38	108-67-8	
Vinyl chloride	0.73U	ug/kg	4.5	0.73	1		04/12/12 15:38	75-01-4	
Xylene (Total)	2.8U	ug/kg	13.5	2.8	1		04/12/12 15:38	1330-20-7	
m&p-Xylene	1.7U	ug/kg	9.0	1.7	1		04/12/12 15:38	179601-23-1	
o-Xylene	1.0U	ug/kg	4.5	1.0	1		04/12/12 15:38	95-47-6	
Surrogates									
Toluene-d8 (S)	96	%	70-130		1		04/12/12 15:38	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		1		04/12/12 15:38	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		04/12/12 15:38	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87							
Percent Moisture	12.6	%	0.10	0.10	1		04/19/12 14:33		

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-A5-S-2-4 **Lab ID: 3066909007** Collected: 04/05/12 09:55 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	16.1	mg/kg	0.38	0.32	1	04/11/12 10:35	04/12/12 10:22	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	1.5U	ug/kg	7.8	1.5	1		04/12/12 16:01	67-64-1	
Benzene	1.8J	ug/kg	3.9	0.60	1		04/12/12 16:01	71-43-2	
Bromodichloromethane	1.4U	ug/kg	3.9	1.4	1		04/12/12 16:01	75-27-4	
Bromoform	2.0U	ug/kg	3.9	2.0	1		04/12/12 16:01	75-25-2	
Bromomethane	2.3U	ug/kg	3.9	2.3	1		04/12/12 16:01	74-83-9	
TOTAL BTEX	5.5U	ug/kg	23.3	5.5	1		04/12/12 16:01		
2-Butanone (MEK)	0.98U	ug/kg	7.8	0.98	1		04/12/12 16:01	78-93-3	
Carbon disulfide	0.59U	ug/kg	3.9	0.59	1		04/12/12 16:01	75-15-0	
Carbon tetrachloride	0.69U	ug/kg	3.9	0.69	1		04/12/12 16:01	56-23-5	
Chlorobenzene	0.77U	ug/kg	3.9	0.77	1		04/12/12 16:01	108-90-7	
Chloroethane	1.3U	ug/kg	3.9	1.3	1		04/12/12 16:01	75-00-3	
Chloroform	0.55U	ug/kg	3.9	0.55	1		04/12/12 16:01	67-66-3	
Chloromethane	0.81U	ug/kg	3.9	0.81	1		04/12/12 16:01	74-87-3	
Dibromochloromethane	1.2U	ug/kg	3.9	1.2	1		04/12/12 16:01	124-48-1	
1,2-Dibromoethane (EDB)	2.0U	ug/kg	3.9	2.0	1		04/12/12 16:01	106-93-4	
1,2-Dichlorobenzene	0.85U	ug/kg	3.9	0.85	1		04/12/12 16:01	95-50-1	
1,3-Dichlorobenzene	0.98U	ug/kg	3.9	0.98	1		04/12/12 16:01	541-73-1	
1,4-Dichlorobenzene	0.95U	ug/kg	3.9	0.95	1		04/12/12 16:01	106-46-7	
1,1-Dichloroethane	0.61U	ug/kg	3.9	0.61	1		04/12/12 16:01	75-34-3	
1,2-Dichloroethane	0.71U	ug/kg	3.9	0.71	1		04/12/12 16:01	107-06-2	
1,2-Dichloroethene (Total)	2.5U	ug/kg	7.8	2.5	1		04/12/12 16:01	540-59-0	
1,1-Dichloroethene	0.63U	ug/kg	3.9	0.63	1		04/12/12 16:01	75-35-4	
cis-1,2-Dichloroethene	1.9U	ug/kg	3.9	1.9	1		04/12/12 16:01	156-59-2	
trans-1,2-Dichloroethene	0.63U	ug/kg	3.9	0.63	1		04/12/12 16:01	156-60-5	
1,2-Dichloropropane	1.3U	ug/kg	3.9	1.3	1		04/12/12 16:01	78-87-5	
cis-1,3-Dichloropropene	1.2U	ug/kg	3.9	1.2	1		04/12/12 16:01	10061-01-5	
trans-1,3-Dichloropropene	1.3U	ug/kg	3.9	1.3	1		04/12/12 16:01	10061-02-6	
Ethylbenzene	2.0U	ug/kg	3.9	2.0	1		04/12/12 16:01	100-41-4	
2-Hexanone	0.91U	ug/kg	7.8	0.91	1		04/12/12 16:01	591-78-6	
Isopropylbenzene (Cumene)	0.82U	ug/kg	3.9	0.82	1		04/12/12 16:01	98-82-8	
Methylene Chloride	1.0U	ug/kg	3.9	1.0	1		04/12/12 16:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.80U	ug/kg	7.8	0.80	1		04/12/12 16:01	108-10-1	
Methyl-tert-butyl ether	0.55U	ug/kg	3.9	0.55	1		04/12/12 16:01	1634-04-4	
Naphthalene	2.0U	ug/kg	3.9	2.0	1		04/12/12 16:01	91-20-3	
Styrene	0.86U	ug/kg	3.9	0.86	1		04/12/12 16:01	100-42-5	
1,1,2,2-Tetrachloroethane	0.69U	ug/kg	3.9	0.69	1		04/12/12 16:01	79-34-5	
Tetrachloroethene	0.56U	ug/kg	3.9	0.56	1		04/12/12 16:01	127-18-4	
Toluene	0.50U	ug/kg	3.9	0.50	1		04/12/12 16:01	108-88-3	
1,1,1-Trichloroethane	2.0U	ug/kg	3.9	2.0	1		04/12/12 16:01	71-55-6	
1,1,2-Trichloroethane	0.71U	ug/kg	3.9	0.71	1		04/12/12 16:01	79-00-5	
Trichloroethene	0.59U	ug/kg	3.9	0.59	1		04/12/12 16:01	79-01-6	
1,2,4-Trimethylbenzene	0.90U	ug/kg	3.9	0.90	1		04/12/12 16:01	95-63-6	

Date: 05/31/2012 11:23 AM

REPORT OF LABORATORY ANALYSIS

Page 19 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-A5-S-2-4 **Lab ID: 3066909007** Collected: 04/05/12 09:55 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	1.0U	ug/kg	3.9	1.0	1		04/12/12 16:01	108-67-8	
Vinyl chloride	0.63U	ug/kg	3.9	0.63	1		04/12/12 16:01	75-01-4	
Xylene (Total)	2.4U	ug/kg	11.6	2.4	1		04/12/12 16:01	1330-20-7	
m&p-Xylene	1.5U	ug/kg	7.8	1.5	1		04/12/12 16:01	179601-23-1	
o-Xylene	0.88U	ug/kg	3.9	0.88	1		04/12/12 16:01	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	70-130		1		04/12/12 16:01	2037-26-5	
4-Bromofluorobenzene (S)	116	%	70-130		1		04/12/12 16:01	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130		1		04/12/12 16:01	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87							
Percent Moisture	6.0	%	0.10	0.10	1		04/19/12 14:34		

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-A8-S-4-6 **Lab ID: 3066909008** Collected: 04/05/12 13:35 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	13.2	mg/kg	0.32	0.27	1	04/11/12 10:35	04/12/12 10:25	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	1.8U	ug/kg	9.3	1.8	1		04/12/12 16:24	67-64-1	
Benzene	12.0	ug/kg	4.6	0.72	1		04/12/12 16:24	71-43-2	
Bromodichloromethane	1.7U	ug/kg	4.6	1.7	1		04/12/12 16:24	75-27-4	
Bromoform	2.3U	ug/kg	4.6	2.3	1		04/12/12 16:24	75-25-2	
Bromomethane	2.7U	ug/kg	4.6	2.7	1		04/12/12 16:24	74-83-9	
TOTAL BTEX	12.0J	ug/kg	27.8	6.5	1		04/12/12 16:24		
2-Butanone (MEK)	1.2U	ug/kg	9.3	1.2	1		04/12/12 16:24	78-93-3	
Carbon disulfide	3.4J	ug/kg	4.6	0.71	1		04/12/12 16:24	75-15-0	
Carbon tetrachloride	0.82U	ug/kg	4.6	0.82	1		04/12/12 16:24	56-23-5	
Chlorobenzene	0.92U	ug/kg	4.6	0.92	1		04/12/12 16:24	108-90-7	
Chloroethane	1.5U	ug/kg	4.6	1.5	1		04/12/12 16:24	75-00-3	
Chloroform	0.66U	ug/kg	4.6	0.66	1		04/12/12 16:24	67-66-3	
Chloromethane	0.97U	ug/kg	4.6	0.97	1		04/12/12 16:24	74-87-3	
Dibromochloromethane	1.4U	ug/kg	4.6	1.4	1		04/12/12 16:24	124-48-1	
1,2-Dibromoethane (EDB)	2.4U	ug/kg	4.6	2.4	1		04/12/12 16:24	106-93-4	
1,2-Dichlorobenzene	1.0U	ug/kg	4.6	1.0	1		04/12/12 16:24	95-50-1	
1,3-Dichlorobenzene	1.2U	ug/kg	4.6	1.2	1		04/12/12 16:24	541-73-1	
1,4-Dichlorobenzene	1.1U	ug/kg	4.6	1.1	1		04/12/12 16:24	106-46-7	
1,1-Dichloroethane	0.73U	ug/kg	4.6	0.73	1		04/12/12 16:24	75-34-3	
1,2-Dichloroethane	0.84U	ug/kg	4.6	0.84	1		04/12/12 16:24	107-06-2	
1,2-Dichloroethene (Total)	3.0U	ug/kg	9.3	3.0	1		04/12/12 16:24	540-59-0	
1,1-Dichloroethene	0.75U	ug/kg	4.6	0.75	1		04/12/12 16:24	75-35-4	
cis-1,2-Dichloroethene	2.3U	ug/kg	4.6	2.3	1		04/12/12 16:24	156-59-2	
trans-1,2-Dichloroethene	0.76U	ug/kg	4.6	0.76	1		04/12/12 16:24	156-60-5	
1,2-Dichloropropane	1.5U	ug/kg	4.6	1.5	1		04/12/12 16:24	78-87-5	
cis-1,3-Dichloropropene	1.5U	ug/kg	4.6	1.5	1		04/12/12 16:24	10061-01-5	
trans-1,3-Dichloropropene	1.5U	ug/kg	4.6	1.5	1		04/12/12 16:24	10061-02-6	
Ethylbenzene	2.4U	ug/kg	4.6	2.4	1		04/12/12 16:24	100-41-4	
2-Hexanone	1.1U	ug/kg	9.3	1.1	1		04/12/12 16:24	591-78-6	
Isopropylbenzene (Cumene)	0.98U	ug/kg	4.6	0.98	1		04/12/12 16:24	98-82-8	
Methylene Chloride	1.2U	ug/kg	4.6	1.2	1		04/12/12 16:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	61.9	ug/kg	9.3	0.95	1		04/12/12 16:24	108-10-1	
Methyl-tert-butyl ether	0.66U	ug/kg	4.6	0.66	1		04/12/12 16:24	1634-04-4	
Naphthalene	3.5J	ug/kg	4.6	2.3	1		04/12/12 16:24	91-20-3	
Styrene	1.0U	ug/kg	4.6	1.0	1		04/12/12 16:24	100-42-5	
1,1,2,2-Tetrachloroethane	0.82U	ug/kg	4.6	0.82	1		04/12/12 16:24	79-34-5	
Tetrachloroethene	0.67U	ug/kg	4.6	0.67	1		04/12/12 16:24	127-18-4	
Toluene	3.2J	ug/kg	4.6	0.60	1		04/12/12 16:24	108-88-3	
1,1,1-Trichloroethane	2.4U	ug/kg	4.6	2.4	1		04/12/12 16:24	71-55-6	
1,1,2-Trichloroethane	0.85U	ug/kg	4.6	0.85	1		04/12/12 16:24	79-00-5	
Trichloroethene	0.70U	ug/kg	4.6	0.70	1		04/12/12 16:24	79-01-6	
1,2,4-Trimethylbenzene	4.9	ug/kg	4.6	1.1	1		04/12/12 16:24	95-63-6	

Date: 05/31/2012 11:23 AM

REPORT OF LABORATORY ANALYSIS

Page 21 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-A8-S-4-6 **Lab ID: 3066909008** Collected: 04/05/12 13:35 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	1.3U	ug/kg	4.6	1.3	1		04/12/12 16:24	108-67-8	
Vinyl chloride	0.75U	ug/kg	4.6	0.75	1		04/12/12 16:24	75-01-4	
Xylene (Total)	2.8U	ug/kg	13.9	2.8	1		04/12/12 16:24	1330-20-7	
m&p-Xylene	1.8U	ug/kg	9.3	1.8	1		04/12/12 16:24	179601-23-1	
o-Xylene	1.0U	ug/kg	4.6	1.0	1		04/12/12 16:24	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	70-130		1		04/12/12 16:24	2037-26-5	
4-Bromofluorobenzene (S)	83	%	70-130		1		04/12/12 16:24	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		04/12/12 16:24	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87							
Percent Moisture	11.4	%	0.10	0.10	1		04/19/12 14:34		

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-A7-S-2-4 **Lab ID: 3066909009** Collected: 04/05/12 11:40 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	16.7	mg/kg	0.39	0.33	1	04/11/12 10:35	04/12/12 10:28	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	1.6U	ug/kg	8.2	1.6	1		04/12/12 16:48	67-64-1	
Benzene	3.9J	ug/kg	4.1	0.64	1		04/12/12 16:48	71-43-2	
Bromodichloromethane	1.5U	ug/kg	4.1	1.5	1		04/12/12 16:48	75-27-4	
Bromoform	2.1U	ug/kg	4.1	2.1	1		04/12/12 16:48	75-25-2	
Bromomethane	2.4U	ug/kg	4.1	2.4	1		04/12/12 16:48	74-83-9	
TOTAL BTEX	5.8U	ug/kg	24.6	5.8	1		04/12/12 16:48		
2-Butanone (MEK)	1.0U	ug/kg	8.2	1.0	1		04/12/12 16:48	78-93-3	
Carbon disulfide	3.1J	ug/kg	4.1	0.63	1		04/12/12 16:48	75-15-0	
Carbon tetrachloride	0.73U	ug/kg	4.1	0.73	1		04/12/12 16:48	56-23-5	
Chlorobenzene	0.81U	ug/kg	4.1	0.81	1		04/12/12 16:48	108-90-7	
Chloroethane	1.3U	ug/kg	4.1	1.3	1		04/12/12 16:48	75-00-3	
Chloroform	0.58U	ug/kg	4.1	0.58	1		04/12/12 16:48	67-66-3	
Chloromethane	0.86U	ug/kg	4.1	0.86	1		04/12/12 16:48	74-87-3	
Dibromochloromethane	1.3U	ug/kg	4.1	1.3	1		04/12/12 16:48	124-48-1	
1,2-Dibromoethane (EDB)	2.1U	ug/kg	4.1	2.1	1		04/12/12 16:48	106-93-4	
1,2-Dichlorobenzene	0.89U	ug/kg	4.1	0.89	1		04/12/12 16:48	95-50-1	
1,3-Dichlorobenzene	1.0U	ug/kg	4.1	1.0	1		04/12/12 16:48	541-73-1	
1,4-Dichlorobenzene	1.0U	ug/kg	4.1	1.0	1		04/12/12 16:48	106-46-7	
1,1-Dichloroethane	0.65U	ug/kg	4.1	0.65	1		04/12/12 16:48	75-34-3	
1,2-Dichloroethane	0.75U	ug/kg	4.1	0.75	1		04/12/12 16:48	107-06-2	
1,2-Dichloroethene (Total)	2.7U	ug/kg	8.2	2.7	1		04/12/12 16:48	540-59-0	
1,1-Dichloroethene	0.66U	ug/kg	4.1	0.66	1		04/12/12 16:48	75-35-4	
cis-1,2-Dichloroethene	2.0U	ug/kg	4.1	2.0	1		04/12/12 16:48	156-59-2	
trans-1,2-Dichloroethene	0.67U	ug/kg	4.1	0.67	1		04/12/12 16:48	156-60-5	
1,2-Dichloropropane	1.3U	ug/kg	4.1	1.3	1		04/12/12 16:48	78-87-5	
cis-1,3-Dichloropropene	1.3U	ug/kg	4.1	1.3	1		04/12/12 16:48	10061-01-5	
trans-1,3-Dichloropropene	1.3U	ug/kg	4.1	1.3	1		04/12/12 16:48	10061-02-6	
Ethylbenzene	2.1U	ug/kg	4.1	2.1	1		04/12/12 16:48	100-41-4	
2-Hexanone	0.97U	ug/kg	8.2	0.97	1		04/12/12 16:48	591-78-6	
Isopropylbenzene (Cumene)	0.87U	ug/kg	4.1	0.87	1		04/12/12 16:48	98-82-8	
Methylene Chloride	1.1U	ug/kg	4.1	1.1	1		04/12/12 16:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.84U	ug/kg	8.2	0.84	1		04/12/12 16:48	108-10-1	
Methyl-tert-butyl ether	0.58U	ug/kg	4.1	0.58	1		04/12/12 16:48	1634-04-4	
Naphthalene	2.1U	ug/kg	4.1	2.1	1		04/12/12 16:48	91-20-3	
Styrene	0.91U	ug/kg	4.1	0.91	1		04/12/12 16:48	100-42-5	
1,1,2,2-Tetrachloroethane	0.73U	ug/kg	4.1	0.73	1		04/12/12 16:48	79-34-5	
Tetrachloroethene	0.60U	ug/kg	4.1	0.60	1		04/12/12 16:48	127-18-4	
Toluene	0.57J	ug/kg	4.1	0.53	1		04/12/12 16:48	108-88-3	
1,1,1-Trichloroethane	2.1U	ug/kg	4.1	2.1	1		04/12/12 16:48	71-55-6	
1,1,2-Trichloroethane	0.76U	ug/kg	4.1	0.76	1		04/12/12 16:48	79-00-5	
Trichloroethene	0.62U	ug/kg	4.1	0.62	1		04/12/12 16:48	79-01-6	
1,2,4-Trimethylbenzene	0.95U	ug/kg	4.1	0.95	1		04/12/12 16:48	95-63-6	

Date: 05/31/2012 11:23 AM

REPORT OF LABORATORY ANALYSIS

Page 23 of 33

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: TRAMP-A7-S-2-4 **Lab ID: 3066909009** Collected: 04/05/12 11:40 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	1.1U	ug/kg	4.1	1.1	1		04/12/12 16:48	108-67-8	
Vinyl chloride	0.66U	ug/kg	4.1	0.66	1		04/12/12 16:48	75-01-4	
Xylene (Total)	2.5U	ug/kg	12.3	2.5	1		04/12/12 16:48	1330-20-7	
m&p-Xylene	1.6U	ug/kg	8.2	1.6	1		04/12/12 16:48	179601-23-1	
o-Xylene	0.93U	ug/kg	4.1	0.93	1		04/12/12 16:48	95-47-6	
Surrogates									
Toluene-d8 (S)	95	%	70-130		1		04/12/12 16:48	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		04/12/12 16:48	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		04/12/12 16:48	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	13.6	%	0.10	0.10	1		04/19/12 14:34		

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: Duplicate 1 **Lab ID: 3066909010** Collected: 04/05/12 00:01 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	15.9	mg/kg	0.39	0.33	1	04/11/12 10:35	04/12/12 10:31	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	1.7U	ug/kg	8.5	1.7	1		04/12/12 17:11	67-64-1	
Benzene	3.0J	ug/kg	4.3	0.66	1		04/12/12 17:11	71-43-2	
Bromodichloromethane	1.5U	ug/kg	4.3	1.5	1		04/12/12 17:11	75-27-4	
Bromoform	2.2U	ug/kg	4.3	2.2	1		04/12/12 17:11	75-25-2	
Bromomethane	2.5U	ug/kg	4.3	2.5	1		04/12/12 17:11	74-83-9	
TOTAL BTEX	6.0U	ug/kg	25.6	6.0	1		04/12/12 17:11		
2-Butanone (MEK)	1.1U	ug/kg	8.5	1.1	1		04/12/12 17:11	78-93-3	
Carbon disulfide	8.1	ug/kg	4.3	0.65	1		04/12/12 17:11	75-15-0	
Carbon tetrachloride	0.76U	ug/kg	4.3	0.76	1		04/12/12 17:11	56-23-5	
Chlorobenzene	0.84U	ug/kg	4.3	0.84	1		04/12/12 17:11	108-90-7	
Chloroethane	1.4U	ug/kg	4.3	1.4	1		04/12/12 17:11	75-00-3	
Chloroform	0.61U	ug/kg	4.3	0.61	1		04/12/12 17:11	67-66-3	
Chloromethane	0.89U	ug/kg	4.3	0.89	1		04/12/12 17:11	74-87-3	
Dibromochloromethane	1.3U	ug/kg	4.3	1.3	1		04/12/12 17:11	124-48-1	
1,2-Dibromoethane (EDB)	2.2U	ug/kg	4.3	2.2	1		04/12/12 17:11	106-93-4	
1,2-Dichlorobenzene	0.93U	ug/kg	4.3	0.93	1		04/12/12 17:11	95-50-1	
1,3-Dichlorobenzene	1.1U	ug/kg	4.3	1.1	1		04/12/12 17:11	541-73-1	
1,4-Dichlorobenzene	1.0U	ug/kg	4.3	1.0	1		04/12/12 17:11	106-46-7	
1,1-Dichloroethane	0.68U	ug/kg	4.3	0.68	1		04/12/12 17:11	75-34-3	
1,2-Dichloroethane	0.78U	ug/kg	4.3	0.78	1		04/12/12 17:11	107-06-2	
1,2-Dichloroethene (Total)	2.8U	ug/kg	8.5	2.8	1		04/12/12 17:11	540-59-0	
1,1-Dichloroethene	0.69U	ug/kg	4.3	0.69	1		04/12/12 17:11	75-35-4	
cis-1,2-Dichloroethene	2.1U	ug/kg	4.3	2.1	1		04/12/12 17:11	156-59-2	
trans-1,2-Dichloroethene	0.70U	ug/kg	4.3	0.70	1		04/12/12 17:11	156-60-5	
1,2-Dichloropropane	1.4U	ug/kg	4.3	1.4	1		04/12/12 17:11	78-87-5	
cis-1,3-Dichloropropene	1.3U	ug/kg	4.3	1.3	1		04/12/12 17:11	10061-01-5	
trans-1,3-Dichloropropene	1.4U	ug/kg	4.3	1.4	1		04/12/12 17:11	10061-02-6	
Ethylbenzene	2.2U	ug/kg	4.3	2.2	1		04/12/12 17:11	100-41-4	
2-Hexanone	1.0U	ug/kg	8.5	1.0	1		04/12/12 17:11	591-78-6	
Isopropylbenzene (Cumene)	0.90U	ug/kg	4.3	0.90	1		04/12/12 17:11	98-82-8	
Methylene Chloride	1.1U	ug/kg	4.3	1.1	1		04/12/12 17:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.88U	ug/kg	8.5	0.88	1		04/12/12 17:11	108-10-1	
Methyl-tert-butyl ether	0.61U	ug/kg	4.3	0.61	1		04/12/12 17:11	1634-04-4	
Naphthalene	2.1U	ug/kg	4.3	2.1	1		04/12/12 17:11	91-20-3	
Styrene	0.95U	ug/kg	4.3	0.95	1		04/12/12 17:11	100-42-5	
1,1,2,2-Tetrachloroethane	0.76U	ug/kg	4.3	0.76	1		04/12/12 17:11	79-34-5	
Tetrachloroethene	0.62U	ug/kg	4.3	0.62	1		04/12/12 17:11	127-18-4	
Toluene	0.56J	ug/kg	4.3	0.55	1		04/12/12 17:11	108-88-3	
1,1,1-Trichloroethane	2.2U	ug/kg	4.3	2.2	1		04/12/12 17:11	71-55-6	
1,1,2-Trichloroethane	0.78U	ug/kg	4.3	0.78	1		04/12/12 17:11	79-00-5	
Trichloroethene	0.64U	ug/kg	4.3	0.64	1		04/12/12 17:11	79-01-6	
1,2,4-Trimethylbenzene	0.99U	ug/kg	4.3	0.99	1		04/12/12 17:11	95-63-6	

ANALYTICAL RESULTS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Sample: Duplicate 1 **Lab ID: 3066909010** Collected: 04/05/12 00:01 Received: 04/06/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	1.2U	ug/kg	4.3	1.2	1		04/12/12 17:11	108-67-8	
Vinyl chloride	0.69U	ug/kg	4.3	0.69	1		04/12/12 17:11	75-01-4	
Xylene (Total)	2.6U	ug/kg	12.8	2.6	1		04/12/12 17:11	1330-20-7	
m&p-Xylene	1.6U	ug/kg	8.5	1.6	1		04/12/12 17:11	179601-23-1	
o-Xylene	0.96U	ug/kg	4.3	0.96	1		04/12/12 17:11	95-47-6	
Surrogates									
Toluene-d8 (S)	97	%	70-130		1		04/12/12 17:11	2037-26-5	
4-Bromofluorobenzene (S)	95	%	70-130		1		04/12/12 17:11	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		04/12/12 17:11	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87							
Percent Moisture	11.5	%	0.10	0.10	1		04/19/12 14:34		

QUALITY CONTROL DATA

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

QC Batch:	MPRP/8103	Analysis Method:	EPA 6010B
QC Batch Method:	EPA 3050	Analysis Description:	6010 MET
Associated Lab Samples:	3066909001, 3066909002, 3066909003, 3066909004, 3066909005, 3066909006, 3066909007, 3066909008, 3066909009, 3066909010		

METHOD BLANK:	428495	Matrix:	Solid
Associated Lab Samples:	3066909001, 3066909002, 3066909003, 3066909004, 3066909005, 3066909006, 3066909007, 3066909008, 3066909009, 3066909010		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	0.42U	0.50	04/12/12 09:38	

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	48.8	98	80-120	

Parameter	Units	3066909001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	19.6	54.5	71.1	95	80-120	

Parameter	Units	3066909001 Result	Dup Result	RPD	Max RPD	Qualifiers
Lead	mg/kg	19.6	18.7	5	20	

QUALITY CONTROL DATA

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

QC Batch:	MSV/12486	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 5035 Low
Associated Lab Samples:	3066909001, 3066909002, 3066909003, 3066909004, 3066909005, 3066909006, 3066909007, 3066909008, 3066909009, 3066909010		

METHOD BLANK: 429278 Matrix: Solid

Associated Lab Samples: 3066909001, 3066909002, 3066909003, 3066909004, 3066909005, 3066909006, 3066909007, 3066909008, 3066909009, 3066909010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	2.6U	5.0	04/12/12 13:19	
1,1,2,2-Tetrachloroethane	ug/kg	0.89U	5.0	04/12/12 13:19	
1,1,2-Trichloroethane	ug/kg	0.92U	5.0	04/12/12 13:19	
1,1-Dichloroethane	ug/kg	0.79U	5.0	04/12/12 13:19	
1,1-Dichloroethene	ug/kg	0.81U	5.0	04/12/12 13:19	
1,2,4-Trimethylbenzene	ug/kg	1.2U	5.0	04/12/12 13:19	
1,2-Dibromoethane (EDB)	ug/kg	2.6U	5.0	04/12/12 13:19	
1,2-Dichlorobenzene	ug/kg	1.1U	5.0	04/12/12 13:19	
1,2-Dichloroethane	ug/kg	0.91U	5.0	04/12/12 13:19	
1,2-Dichloropropane	ug/kg	1.6U	5.0	04/12/12 13:19	
1,3,5-Trimethylbenzene	ug/kg	1.4U	5.0	04/12/12 13:19	
1,3-Dichlorobenzene	ug/kg	1.3U	5.0	04/12/12 13:19	
1,4-Dichlorobenzene	ug/kg	1.2U	5.0	04/12/12 13:19	
2-Butanone (MEK)	ug/kg	1.3U	10.0	04/12/12 13:19	
2-Hexanone	ug/kg	1.2U	10.0	04/12/12 13:19	
4-Methyl-2-pentanone (MIBK)	ug/kg	1.0U	10.0	04/12/12 13:19	
Acetone	ug/kg	5.6J	10.0	04/12/12 13:19	
Benzene	ug/kg	0.78U	5.0	04/12/12 13:19	
Bromodichloromethane	ug/kg	1.8U	5.0	04/12/12 13:19	
Bromoform	ug/kg	2.5U	5.0	04/12/12 13:19	
Bromomethane	ug/kg	2.9U	5.0	04/12/12 13:19	
Carbon disulfide	ug/kg	0.77U	5.0	04/12/12 13:19	
Carbon tetrachloride	ug/kg	0.89U	5.0	04/12/12 13:19	
Chlorobenzene	ug/kg	0.99U	5.0	04/12/12 13:19	
Chloroethane	ug/kg	1.6U	5.0	04/12/12 13:19	
Chloroform	ug/kg	0.71U	5.0	04/12/12 13:19	
Chloromethane	ug/kg	1.0U	5.0	04/12/12 13:19	
cis-1,2-Dichloroethene	ug/kg	2.5U	5.0	04/12/12 13:19	
cis-1,3-Dichloropropene	ug/kg	1.6U	5.0	04/12/12 13:19	
Dibromochloromethane	ug/kg	1.5U	5.0	04/12/12 13:19	
Ethylbenzene	ug/kg	2.6U	5.0	04/12/12 13:19	
Isopropylbenzene (Cumene)	ug/kg	1.1U	5.0	04/12/12 13:19	
m&p-Xylene	ug/kg	1.9U	10.0	04/12/12 13:19	
Methyl-tert-butyl ether	ug/kg	0.71U	5.0	04/12/12 13:19	
Methylene Chloride	ug/kg	3.3J	5.0	04/12/12 13:19	
Naphthalene	ug/kg	2.5U	5.0	04/12/12 13:19	
o-Xylene	ug/kg	1.1U	5.0	04/12/12 13:19	
Styrene	ug/kg	1.1U	5.0	04/12/12 13:19	
Tetrachloroethene	ug/kg	0.73U	5.0	04/12/12 13:19	
Toluene	ug/kg	0.64U	5.0	04/12/12 13:19	
TOTAL BTEX	ug/kg	7.0U	30.0	04/12/12 13:19	

QUALITY CONTROL DATA

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

METHOD BLANK: 429278

Matrix: Solid

Associated Lab Samples: 3066909001, 3066909002, 3066909003, 3066909004, 3066909005, 3066909006, 3066909007, 3066909008, 3066909009, 3066909010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/kg	0.82U	5.0	04/12/12 13:19	
trans-1,3-Dichloropropene	ug/kg	1.6U	5.0	04/12/12 13:19	
Trichloroethene	ug/kg	0.76U	5.0	04/12/12 13:19	
Vinyl chloride	ug/kg	0.81U	5.0	04/12/12 13:19	
Xylene (Total)	ug/kg	3.1U	15.0	04/12/12 13:19	
1,2-Dichloroethane-d4 (S)	%	100	70-130	04/12/12 13:19	
4-Bromofluorobenzene (S)	%	100	70-130	04/12/12 13:19	
Toluene-d8 (S)	%	92	70-130	04/12/12 13:19	

LABORATORY CONTROL SAMPLE: 429279

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	20	18.3	92	55-141	
1,1,2,2-Tetrachloroethane	ug/kg	20	15.0	75	58-124	
1,1,2-Trichloroethane	ug/kg	20	16.7	84	70-118	
1,1-Dichloroethane	ug/kg	20	15.6	78	64-127	
1,1-Dichloroethene	ug/kg	20	17.9	90	50-133	
1,2,4-Trimethylbenzene	ug/kg	20	15.6	78	67-130	
1,2-Dibromoethane (EDB)	ug/kg	20	16.3	81	67-117	
1,2-Dichlorobenzene	ug/kg	20	16.0	80	67-122	
1,2-Dichloroethane	ug/kg	20	14.5	72	54-132	
1,2-Dichloropropane	ug/kg	20	14.4	72	68-112	
1,3,5-Trimethylbenzene	ug/kg	20	15.9	80	65-132	
1,3-Dichlorobenzene	ug/kg	20	16.2	81	65-127	
1,4-Dichlorobenzene	ug/kg	20	15.8	79	66-127	
2-Butanone (MEK)	ug/kg	20	20.0	100	54-135	
2-Hexanone	ug/kg	20	16.5	83	58-148	
4-Methyl-2-pentanone (MIBK)	ug/kg	20	14.9	74	55-142	
Acetone	ug/kg	20	30.3	151	39-200	
Benzene	ug/kg	20	16.6	83	65-130	
Bromodichloromethane	ug/kg	20	14.8	74	57-125	
Bromoform	ug/kg	20	16.1	81	53-121	
Bromomethane	ug/kg	20	15.3	76	30-167	
Carbon disulfide	ug/kg	20	18.1	91	49-150	
Carbon tetrachloride	ug/kg	20	18.3	92	47-146	
Chlorobenzene	ug/kg	20	16.9	84	67-124	
Chloroethane	ug/kg	20	20.3	101	34-170	
Chloroform	ug/kg	20	16.1	80	63-128	
Chloromethane	ug/kg	20	15.0	75	39-159	
cis-1,2-Dichloroethene	ug/kg	20	15.0	75	64-126	
cis-1,3-Dichloropropene	ug/kg	20	15.2	76	66-124	
Dibromochloromethane	ug/kg	20	16.0	80	56-122	
Ethylbenzene	ug/kg	20	17.7	88	65-131	
Isopropylbenzene (Cumene)	ug/kg	20	18.1	90	64-137	

QUALITY CONTROL DATA

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

LABORATORY CONTROL SAMPLE: 429279

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
m&p-Xylene	ug/kg	40	34.3	86	63-136	
Methyl-tert-butyl ether	ug/kg	20	16.7	84	71-130	
Methylene Chloride	ug/kg	20	19.5	98	45-136	
Naphthalene	ug/kg	20	15.8	79	70-123	
o-Xylene	ug/kg	20	17.6	88	68-129	
Styrene	ug/kg	20	17.0	85	64-122	
Tetrachloroethene	ug/kg	20	19.0	95	61-138	
Toluene	ug/kg	20	16.9	85	63-132	
TOTAL BTEX	ug/kg		103			
trans-1,2-Dichloroethene	ug/kg	20	15.7	79	60-130	
trans-1,3-Dichloropropene	ug/kg	20	14.4	72	58-116	
Trichloroethene	ug/kg	20	18.3	92	65-131	
Vinyl chloride	ug/kg	20	16.4	82	49-149	
Xylene (Total)	ug/kg	60	51.9	87	65-134	
1,2-Dichloroethane-d4 (S)	%			92	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Toluene-d8 (S)	%			96	70-130	

QUALITY CONTROL DATA

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

QC Batch:	PMST/3116	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	3066909001, 3066909002, 3066909003, 3066909004, 3066909005, 3066909006, 3066909007, 3066909008, 3066909009, 3066909010		

SAMPLE DUPLICATE: 431587

Parameter	Units	3067139001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	36.9	36.2	2	20	

SAMPLE DUPLICATE: 431588

Parameter	Units	3067139006 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	20.4	19.4	5	20	

QUALIFIERS

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/12486

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 911TH AWA T-RAMP

Pace Project No.: 3066909

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3066909001	TRAMP-J1-S-2-4	EPA 3050	MPRP/8103	EPA 6010B	ICP/7542
3066909002	TRAMP-F1-S-4-6	EPA 3050	MPRP/8103	EPA 6010B	ICP/7542
3066909003	TRAMP-L4-S-22-24	EPA 3050	MPRP/8103	EPA 6010B	ICP/7542
3066909004	TRAMP-G3-S-9.5-11.5	EPA 3050	MPRP/8103	EPA 6010B	ICP/7542
3066909005	TRAMP-D3-S-4-6	EPA 3050	MPRP/8103	EPA 6010B	ICP/7542
3066909006	TRAMP-C4-S-4-6	EPA 3050	MPRP/8103	EPA 6010B	ICP/7542
3066909007	TRAMP-A5-S-2-4	EPA 3050	MPRP/8103	EPA 6010B	ICP/7542
3066909008	TRAMP-A8-S-4-6	EPA 3050	MPRP/8103	EPA 6010B	ICP/7542
3066909009	TRAMP-A7-S-2-4	EPA 3050	MPRP/8103	EPA 6010B	ICP/7542
3066909010	Duplicate 1	EPA 3050	MPRP/8103	EPA 6010B	ICP/7542
3066909001	TRAMP-J1-S-2-4	EPA 8260	MSV/12486		
3066909002	TRAMP-F1-S-4-6	EPA 8260	MSV/12486		
3066909003	TRAMP-L4-S-22-24	EPA 8260	MSV/12486		
3066909004	TRAMP-G3-S-9.5-11.5	EPA 8260	MSV/12486		
3066909005	TRAMP-D3-S-4-6	EPA 8260	MSV/12486		
3066909006	TRAMP-C4-S-4-6	EPA 8260	MSV/12486		
3066909007	TRAMP-A5-S-2-4	EPA 8260	MSV/12486		
3066909008	TRAMP-A8-S-4-6	EPA 8260	MSV/12486		
3066909009	TRAMP-A7-S-2-4	EPA 8260	MSV/12486		
3066909010	Duplicate 1	EPA 8260	MSV/12486		
3066909001	TRAMP-J1-S-2-4	ASTM D2974-87	PMST/3116		
3066909002	TRAMP-F1-S-4-6	ASTM D2974-87	PMST/3116		
3066909003	TRAMP-L4-S-22-24	ASTM D2974-87	PMST/3116		
3066909004	TRAMP-G3-S-9.5-11.5	ASTM D2974-87	PMST/3116		
3066909005	TRAMP-D3-S-4-6	ASTM D2974-87	PMST/3116		
3066909006	TRAMP-C4-S-4-6	ASTM D2974-87	PMST/3116		
3066909007	TRAMP-A5-S-2-4	ASTM D2974-87	PMST/3116		
3066909008	TRAMP-A8-S-4-6	ASTM D2974-87	PMST/3116		
3066909009	TRAMP-A7-S-2-4	ASTM D2974-87	PMST/3116		
3066909010	Duplicate 1	ASTM D2974-87	PMST/3116		

April 24, 2012

Jason McCabe
Rhea Engineers & Consultants, Inc.
4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044

RE: Project: 911TH AIRLIFT WING T-RAMP
Pace Project No.: 3067122

Dear Jason McCabe:

Enclosed are the analytical results for sample(s) received by the laboratory between April 10, 2012 and April 12, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Timothy Reed

timothy.reed@pacelabs.com
Project Manager

Enclosures

cc: Erica DeLattre, Rhea Engineers & Consultants, Inc.
Dan DePra, CDM Smith



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

CERTIFICATIONS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601

ACCLASS DOD-ELAP Accreditation #: ADE-1544

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California/TNI Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

Delaware Certification

Florida/TNI Certification #: E87683

Guam/PADEP Certification

Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification

Indiana/PADEP Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana/TNI Certification #: LA080002

Louisiana/TNI Certification #: 4086

Maine Certification #: PA0091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188

Utah/TNI Certification #: ANTE

Virgin Island/PADEP Certification

Virginia Certification #: 00112

Virginia VELAP (Cert # 460198)

Washington Certification #: C868

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

Page 2 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE SUMMARY

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3067122001	TRAMP-D12-S-4-6	Solid	04/09/12 13:58	04/10/12 15:15
3067122002	TRAMP-H8-S-15-17	Solid	04/09/12 10:30	04/10/12 15:15
3067122003	TRAMP-F5-S-6-8	Solid	04/06/12 09:51	04/10/12 15:15
3067122004	TRAMP-E9-S-2-4	Solid	04/09/12 09:45	04/10/12 15:15
3067122005	TRAMP-H6-S-14-16	Solid	04/06/12 13:13	04/10/12 15:15
3067341001	TRAMP-L2-S-6-8	Solid	04/11/12 12:18	04/12/12 17:30
3067341002	DUP-2	Solid		04/12/12 17:30
3067341003	TRAMP-A14-S-2-4	Solid	04/11/12 11:52	04/12/12 17:30
3067341004	TRAMP-A10-S-2-4	Solid	04/11/12 10:42	04/12/12 17:30
3067341005	TRAMP-B13-S-2-4	Solid	04/11/12 09:28	04/12/12 17:30
3067341006	TRAMP-A11-S-2-4	Solid	04/12/12 10:13	04/12/12 17:30

REPORT OF LABORATORY ANALYSIS

Page 3 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE ANALYTE COUNT

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3067122001	TRAMP-D12-S-4-6	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067122002	TRAMP-H8-S-15-17	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067122003	TRAMP-F5-S-6-8	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067122004	TRAMP-E9-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067122005	TRAMP-H6-S-14-16	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067341001	TRAMP-L2-S-6-8	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067341002	DUP-2	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067341003	TRAMP-A14-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067341004	TRAMP-A10-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067341005	TRAMP-B13-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067341006	TRAMP-A11-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1

REPORT OF LABORATORY ANALYSIS

Page 4 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Method: EPA 6010B

Description: 6010 MET ICP

Client: CDM Smith

Date: April 24, 2012

General Information:

11 samples were analyzed for EPA 6010B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: MPRP/8146

D6: The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 431015)
- Lead

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 5 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Method: EPA 8260

Description: 8260 MSV 5030 Low Level

Client: CDM Smith

Date: April 24, 2012

General Information:

11 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/12497

LO: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 429949)
- Chloroethane

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/12486

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/12497

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 6 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-D12-S-4-6 Lab ID: 3067122001 Collected: 04/09/12 13:58 Received: 04/10/12 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	17.2	mg/kg	0.48	0.40	1	04/16/12 10:55	04/17/12 08:50	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	0.0037J	mg/kg	0.010	0.0020	1		04/12/12 17:34	67-64-1	
Benzene	0.022	mg/kg	0.0051	0.00079	1		04/12/12 17:34	71-43-2	
Bromodichloromethane	0.0018U	mg/kg	0.0051	0.0018	1		04/12/12 17:34	75-27-4	
Bromoform	0.0026U	mg/kg	0.0051	0.0026	1		04/12/12 17:34	75-25-2	
Bromomethane	0.0030U	mg/kg	0.0051	0.0030	1		04/12/12 17:34	74-83-9	
TOTAL BTEX	0.030	mg/kg	0.030	0.0071	1		04/12/12 17:34		
2-Butanone (MEK)	0.0013U	mg/kg	0.010	0.0013	1		04/12/12 17:34	78-93-3	
Carbon disulfide	0.0063	mg/kg	0.0051	0.00077	1		04/12/12 17:34	75-15-0	
Carbon tetrachloride	0.00090U	mg/kg	0.0051	0.00090	1		04/12/12 17:34	56-23-5	
Chlorobenzene	0.0010U	mg/kg	0.0051	0.0010	1		04/12/12 17:34	108-90-7	
Chloroethane	0.0016U	mg/kg	0.0051	0.0016	1		04/12/12 17:34	75-00-3	
Chloroform	0.00072U	mg/kg	0.0051	0.00072	1		04/12/12 17:34	67-66-3	
Chloromethane	0.0011U	mg/kg	0.0051	0.0011	1		04/12/12 17:34	74-87-3	
Dibromochloromethane	0.0015U	mg/kg	0.0051	0.0015	1		04/12/12 17:34	124-48-1	
1,2-Dibromoethane (EDB)	0.0026U	mg/kg	0.0051	0.0026	1		04/12/12 17:34	106-93-4	
1,2-Dichlorobenzene	0.0011U	mg/kg	0.0051	0.0011	1		04/12/12 17:34	95-50-1	
1,3-Dichlorobenzene	0.0013U	mg/kg	0.0051	0.0013	1		04/12/12 17:34	541-73-1	
1,4-Dichlorobenzene	0.0012U	mg/kg	0.0051	0.0012	1		04/12/12 17:34	106-46-7	
1,1-Dichloroethane	0.00080U	mg/kg	0.0051	0.00080	1		04/12/12 17:34	75-34-3	
1,2-Dichloroethane	0.00092U	mg/kg	0.0051	0.00092	1		04/12/12 17:34	107-06-2	
1,2-Dichloroethene (Total)	0.0033U	mg/kg	0.010	0.0033	1		04/12/12 17:34	540-59-0	
1,1-Dichloroethene	0.00082U	mg/kg	0.0051	0.00082	1		04/12/12 17:34	75-35-4	
cis-1,2-Dichloroethene	0.0025U	mg/kg	0.0051	0.0025	1		04/12/12 17:34	156-59-2	
trans-1,2-Dichloroethene	0.00083U	mg/kg	0.0051	0.00083	1		04/12/12 17:34	156-60-5	
1,2-Dichloropropane	0.0016U	mg/kg	0.0051	0.0016	1		04/12/12 17:34	78-87-5	
cis-1,3-Dichloropropene	0.0016U	mg/kg	0.0051	0.0016	1		04/12/12 17:34	10061-01-5	
trans-1,3-Dichloropropene	0.0016U	mg/kg	0.0051	0.0016	1		04/12/12 17:34	10061-02-6	
Ethylbenzene	0.0026U	mg/kg	0.0051	0.0026	1		04/12/12 17:34	100-41-4	
2-Hexanone	0.0012U	mg/kg	0.010	0.0012	1		04/12/12 17:34	591-78-6	
Isopropylbenzene (Cumene)	0.0011U	mg/kg	0.0051	0.0011	1		04/12/12 17:34	98-82-8	
Methylene Chloride	0.0014U	mg/kg	0.0051	0.0014	1		04/12/12 17:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.0010U	mg/kg	0.010	0.0010	1		04/12/12 17:34	108-10-1	
Methyl-tert-butyl ether	0.00072U	mg/kg	0.0051	0.00072	1		04/12/12 17:34	1634-04-4	
Naphthalene	0.0025U	mg/kg	0.0051	0.0025	1		04/12/12 17:34	91-20-3	
Styrene	0.0011U	mg/kg	0.0051	0.0011	1		04/12/12 17:34	100-42-5	
1,1,2,2-Tetrachloroethane	0.00090U	mg/kg	0.0051	0.00090	1		04/12/12 17:34	79-34-5	
Tetrachloroethene	0.00073U	mg/kg	0.0051	0.00073	1		04/12/12 17:34	127-18-4	
Toluene	0.0087	mg/kg	0.0051	0.00065	1		04/12/12 17:34	108-88-3	
1,1,1-Trichloroethane	0.0026U	mg/kg	0.0051	0.0026	1		04/12/12 17:34	71-55-6	
1,1,2-Trichloroethane	0.00093U	mg/kg	0.0051	0.00093	1		04/12/12 17:34	79-00-5	
Trichloroethene	0.00076U	mg/kg	0.0051	0.00076	1		04/12/12 17:34	79-01-6	
1,2,4-Trimethylbenzene	0.0013J	mg/kg	0.0051	0.0012	1		04/12/12 17:34	95-63-6	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 7 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-D12-S-4-6 **Lab ID: 3067122001** Collected: 04/09/12 13:58 Received: 04/10/12 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0014U	mg/kg	0.0051	0.0014	1		04/12/12 17:34	108-67-8	
Vinyl chloride	0.00082U	mg/kg	0.0051	0.00082	1		04/12/12 17:34	75-01-4	
Xylene (Total)	0.0049J	mg/kg	0.015	0.0031	1		04/12/12 17:34	1330-20-7	
m&p-Xylene	0.0028J	mg/kg	0.010	0.0019	1		04/12/12 17:34	179601-23-1	
o-Xylene	0.0021J	mg/kg	0.0051	0.0011	1		04/12/12 17:34	95-47-6	
Surrogates									
Toluene-d8 (S)	95 %		70-130		1		04/12/12 17:34	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130		1		04/12/12 17:34	460-00-4	
1,2-Dichloroethane-d4 (S)	101 %		70-130		1		04/12/12 17:34	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	3.1	%	0.10	0.10	1		04/20/12 15:47		

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-H8-S-15-17 Lab ID: 3067122002 Collected: 04/09/12 10:30 Received: 04/10/12 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	32.5	mg/kg	0.43	0.37	1	04/16/12 10:55	04/17/12 09:00	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.013	mg/kg	0.011	0.0021	1		04/12/12 17:57	67-64-1	
Benzene	0.00084U	mg/kg	0.0054	0.00084	1		04/12/12 17:57	71-43-2	
Bromodichloromethane	0.0020U	mg/kg	0.0054	0.0020	1		04/12/12 17:57	75-27-4	
Bromoform	0.0027U	mg/kg	0.0054	0.0027	1		04/12/12 17:57	75-25-2	
Bromomethane	0.0032U	mg/kg	0.0054	0.0032	1		04/12/12 17:57	74-83-9	
TOTAL BTEX	0.0076U	mg/kg	0.032	0.0076	1		04/12/12 17:57		
2-Butanone (MEK)	0.0014U	mg/kg	0.011	0.0014	1		04/12/12 17:57	78-93-3	
Carbon disulfide	0.0072	mg/kg	0.0054	0.00083	1		04/12/12 17:57	75-15-0	
Carbon tetrachloride	0.00096U	mg/kg	0.0054	0.00096	1		04/12/12 17:57	56-23-5	
Chlorobenzene	0.0011U	mg/kg	0.0054	0.0011	1		04/12/12 17:57	108-90-7	
Chloroethane	0.0018U	mg/kg	0.0054	0.0018	1		04/12/12 17:57	75-00-3	
Chloroform	0.00077U	mg/kg	0.0054	0.00077	1		04/12/12 17:57	67-66-3	
Chloromethane	0.0011U	mg/kg	0.0054	0.0011	1		04/12/12 17:57	74-87-3	
Dibromochloromethane	0.0017U	mg/kg	0.0054	0.0017	1		04/12/12 17:57	124-48-1	
1,2-Dibromoethane (EDB)	0.0028U	mg/kg	0.0054	0.0028	1		04/12/12 17:57	106-93-4	
1,2-Dichlorobenzene	0.0012U	mg/kg	0.0054	0.0012	1		04/12/12 17:57	95-50-1	
1,3-Dichlorobenzene	0.0014U	mg/kg	0.0054	0.0014	1		04/12/12 17:57	541-73-1	
1,4-Dichlorobenzene	0.0013U	mg/kg	0.0054	0.0013	1		04/12/12 17:57	106-46-7	
1,1-Dichloroethane	0.00086U	mg/kg	0.0054	0.00086	1		04/12/12 17:57	75-34-3	
1,2-Dichloroethane	0.00098U	mg/kg	0.0054	0.00098	1		04/12/12 17:57	107-06-2	
1,2-Dichloroethene (Total)	0.0035U	mg/kg	0.011	0.0035	1		04/12/12 17:57	540-59-0	
1,1-Dichloroethene	0.00088U	mg/kg	0.0054	0.00088	1		04/12/12 17:57	75-35-4	
cis-1,2-Dichloroethene	0.0027U	mg/kg	0.0054	0.0027	1		04/12/12 17:57	156-59-2	
trans-1,2-Dichloroethene	0.00088U	mg/kg	0.0054	0.00088	1		04/12/12 17:57	156-60-5	
1,2-Dichloropropane	0.0017U	mg/kg	0.0054	0.0017	1		04/12/12 17:57	78-87-5	
cis-1,3-Dichloropropene	0.0017U	mg/kg	0.0054	0.0017	1		04/12/12 17:57	10061-01-5	
trans-1,3-Dichloropropene	0.0018U	mg/kg	0.0054	0.0018	1		04/12/12 17:57	10061-02-6	
Ethylbenzene	0.0028U	mg/kg	0.0054	0.0028	1		04/12/12 17:57	100-41-4	
2-Hexanone	0.0013U	mg/kg	0.011	0.0013	1		04/12/12 17:57	591-78-6	
Isopropylbenzene (Cumene)	0.0011U	mg/kg	0.0054	0.0011	1		04/12/12 17:57	98-82-8	
Methylene Chloride	0.0014U	mg/kg	0.0054	0.0014	1		04/12/12 17:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.0011U	mg/kg	0.011	0.0011	1		04/12/12 17:57	108-10-1	
Methyl-tert-butyl ether	0.00077U	mg/kg	0.0054	0.00077	1		04/12/12 17:57	1634-04-4	
Naphthalene	0.0027U	mg/kg	0.0054	0.0027	1		04/12/12 17:57	91-20-3	
Styrene	0.0012U	mg/kg	0.0054	0.0012	1		04/12/12 17:57	100-42-5	
1,1,2,2-Tetrachloroethane	0.00096U	mg/kg	0.0054	0.00096	1		04/12/12 17:57	79-34-5	
Tetrachloroethene	0.00078U	mg/kg	0.0054	0.00078	1		04/12/12 17:57	127-18-4	
Toluene	0.00069U	mg/kg	0.0054	0.00069	1		04/12/12 17:57	108-88-3	
1,1,1-Trichloroethane	0.0028U	mg/kg	0.0054	0.0028	1		04/12/12 17:57	71-55-6	
1,1,2-Trichloroethane	0.00099U	mg/kg	0.0054	0.00099	1		04/12/12 17:57	79-00-5	
Trichloroethene	0.00082U	mg/kg	0.0054	0.00082	1		04/12/12 17:57	79-01-6	
1,2,4-Trimethylbenzene	0.0013U	mg/kg	0.0054	0.0013	1		04/12/12 17:57	95-63-6	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 9 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-H8-S-15-17 **Lab ID: 3067122002** Collected: 04/09/12 10:30 Received: 04/10/12 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0015U	mg/kg	0.0054	0.0015	1		04/12/12 17:57	108-67-8	
Vinyl chloride	0.00087U	mg/kg	0.0054	0.00087	1		04/12/12 17:57	75-01-4	
Xylene (Total)	0.0033U	mg/kg	0.016	0.0033	1		04/12/12 17:57	1330-20-7	
m&p-Xylene	0.0021U	mg/kg	0.011	0.0021	1		04/12/12 17:57	179601-23-1	
o-Xylene	0.0012U	mg/kg	0.0054	0.0012	1		04/12/12 17:57	95-47-6	
Surrogates									
Toluene-d8 (S)	92	%	70-130		1		04/12/12 17:57	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		04/12/12 17:57	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		04/12/12 17:57	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	23.0	%	0.10	0.10	1		04/20/12 15:47		

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-F5-S-6-8 **Lab ID: 3067122003** Collected: 04/06/12 09:51 Received: 04/10/12 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	19.0	mg/kg	0.48	0.40	1	04/16/12 10:55	04/17/12 09:03	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.039	mg/kg	0.0094	0.0018	1		04/12/12 18:21	67-64-1	
Benzene	0.00073U	mg/kg	0.0047	0.00073	1		04/12/12 18:21	71-43-2	
Bromodichloromethane	0.0017U	mg/kg	0.0047	0.0017	1		04/12/12 18:21	75-27-4	
Bromoform	0.0024U	mg/kg	0.0047	0.0024	1		04/12/12 18:21	75-25-2	
Bromomethane	0.0028U	mg/kg	0.0047	0.0028	1		04/12/12 18:21	74-83-9	
TOTAL BTEX	0.0066U	mg/kg	0.028	0.0066	1		04/12/12 18:21		
2-Butanone (MEK)	0.0068J	mg/kg	0.0094	0.0012	1		04/12/12 18:21	78-93-3	
Carbon disulfide	0.0027J	mg/kg	0.0047	0.00072	1		04/12/12 18:21	75-15-0	
Carbon tetrachloride	0.00083U	mg/kg	0.0047	0.00083	1		04/12/12 18:21	56-23-5	
Chlorobenzene	0.00093U	mg/kg	0.0047	0.00093	1		04/12/12 18:21	108-90-7	
Chloroethane	0.0015U	mg/kg	0.0047	0.0015	1		04/12/12 18:21	75-00-3	
Chloroform	0.00067U	mg/kg	0.0047	0.00067	1		04/12/12 18:21	67-66-3	
Chloromethane	0.00098U	mg/kg	0.0047	0.00098	1		04/12/12 18:21	74-87-3	
Dibromochloromethane	0.0014U	mg/kg	0.0047	0.0014	1		04/12/12 18:21	124-48-1	
1,2-Dibromoethane (EDB)	0.0024U	mg/kg	0.0047	0.0024	1		04/12/12 18:21	106-93-4	
1,2-Dichlorobenzene	0.0010U	mg/kg	0.0047	0.0010	1		04/12/12 18:21	95-50-1	
1,3-Dichlorobenzene	0.0012U	mg/kg	0.0047	0.0012	1		04/12/12 18:21	541-73-1	
1,4-Dichlorobenzene	0.0011U	mg/kg	0.0047	0.0011	1		04/12/12 18:21	106-46-7	
1,1-Dichloroethane	0.00074U	mg/kg	0.0047	0.00074	1		04/12/12 18:21	75-34-3	
1,2-Dichloroethane	0.00085U	mg/kg	0.0047	0.00085	1		04/12/12 18:21	107-06-2	
1,2-Dichloroethene (Total)	0.0031U	mg/kg	0.0094	0.0031	1		04/12/12 18:21	540-59-0	
1,1-Dichloroethene	0.00076U	mg/kg	0.0047	0.00076	1		04/12/12 18:21	75-35-4	
cis-1,2-Dichloroethene	0.0023U	mg/kg	0.0047	0.0023	1		04/12/12 18:21	156-59-2	
trans-1,2-Dichloroethene	0.00077U	mg/kg	0.0047	0.00077	1		04/12/12 18:21	156-60-5	
1,2-Dichloropropane	0.0015U	mg/kg	0.0047	0.0015	1		04/12/12 18:21	78-87-5	
cis-1,3-Dichloropropene	0.0015U	mg/kg	0.0047	0.0015	1		04/12/12 18:21	10061-01-5	
trans-1,3-Dichloropropene	0.0015U	mg/kg	0.0047	0.0015	1		04/12/12 18:21	10061-02-6	
Ethylbenzene	0.0024U	mg/kg	0.0047	0.0024	1		04/12/12 18:21	100-41-4	
2-Hexanone	0.0011U	mg/kg	0.0094	0.0011	1		04/12/12 18:21	591-78-6	
Isopropylbenzene (Cumene)	0.00099U	mg/kg	0.0047	0.00099	1		04/12/12 18:21	98-82-8	
Methylene Chloride	0.0013U	mg/kg	0.0047	0.0013	1		04/12/12 18:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.00096U	mg/kg	0.0094	0.00096	1		04/12/12 18:21	108-10-1	
Methyl-tert-butyl ether	0.00067U	mg/kg	0.0047	0.00067	1		04/12/12 18:21	1634-04-4	
Naphthalene	0.0024U	mg/kg	0.0047	0.0024	1		04/12/12 18:21	91-20-3	
Styrene	0.0010U	mg/kg	0.0047	0.0010	1		04/12/12 18:21	100-42-5	
1,1,2,2-Tetrachloroethane	0.00083U	mg/kg	0.0047	0.00083	1		04/12/12 18:21	79-34-5	
Tetrachloroethene	0.00068U	mg/kg	0.0047	0.00068	1		04/12/12 18:21	127-18-4	
Toluene	0.00060U	mg/kg	0.0047	0.00060	1		04/12/12 18:21	108-88-3	
1,1,1-Trichloroethane	0.0024U	mg/kg	0.0047	0.0024	1		04/12/12 18:21	71-55-6	
1,1,2-Trichloroethane	0.00086U	mg/kg	0.0047	0.00086	1		04/12/12 18:21	79-00-5	
Trichloroethene	0.00071U	mg/kg	0.0047	0.00071	1		04/12/12 18:21	79-01-6	
1,2,4-Trimethylbenzene	0.0011U	mg/kg	0.0047	0.0011	1		04/12/12 18:21	95-63-6	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 11 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-F5-S-6-8 **Lab ID: 3067122003** Collected: 04/06/12 09:51 Received: 04/10/12 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0013U	mg/kg	0.0047	0.0013	1		04/12/12 18:21	108-67-8	
Vinyl chloride	0.00076U	mg/kg	0.0047	0.00076	1		04/12/12 18:21	75-01-4	
Xylene (Total)	0.0029U	mg/kg	0.014	0.0029	1		04/12/12 18:21	1330-20-7	
m&p-Xylene	0.0018U	mg/kg	0.0094	0.0018	1		04/12/12 18:21	179601-23-1	
o-Xylene	0.0011U	mg/kg	0.0047	0.0011	1		04/12/12 18:21	95-47-6	
Surrogates									
Toluene-d8 (S)	95 %		70-130		1		04/12/12 18:21	2037-26-5	
4-Bromofluorobenzene (S)	96 %		70-130		1		04/12/12 18:21	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		70-130		1		04/12/12 18:21	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	13.1	%	0.10	0.10	1		04/20/12 15:47		

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-E9-S-2-4 **Lab ID: 3067122004** Collected: 04/09/12 09:45 Received: 04/10/12 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	15.6	mg/kg	0.47	0.40	1	04/16/12 10:55	04/17/12 09:06	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	0.0016U	mg/kg	0.0084	0.0016	1		04/12/12 18:44	67-64-1	
Benzene	0.0021J	mg/kg	0.0042	0.00065	1		04/12/12 18:44	71-43-2	
Bromodichloromethane	0.0015U	mg/kg	0.0042	0.0015	1		04/12/12 18:44	75-27-4	
Bromoform	0.0021U	mg/kg	0.0042	0.0021	1		04/12/12 18:44	75-25-2	
Bromomethane	0.0025U	mg/kg	0.0042	0.0025	1		04/12/12 18:44	74-83-9	
TOTAL BTEX	0.0059U	mg/kg	0.025	0.0059	1		04/12/12 18:44		
2-Butanone (MEK)	0.0011U	mg/kg	0.0084	0.0011	1		04/12/12 18:44	78-93-3	
Carbon disulfide	0.0017J	mg/kg	0.0042	0.00064	1		04/12/12 18:44	75-15-0	
Carbon tetrachloride	0.00075U	mg/kg	0.0042	0.00075	1		04/12/12 18:44	56-23-5	
Chlorobenzene	0.00083U	mg/kg	0.0042	0.00083	1		04/12/12 18:44	108-90-7	
Chloroethane	0.0014U	mg/kg	0.0042	0.0014	1		04/12/12 18:44	75-00-3	
Chloroform	0.00060U	mg/kg	0.0042	0.00060	1		04/12/12 18:44	67-66-3	
Chloromethane	0.00088U	mg/kg	0.0042	0.00088	1		04/12/12 18:44	74-87-3	
Dibromochloromethane	0.0013U	mg/kg	0.0042	0.0013	1		04/12/12 18:44	124-48-1	
1,2-Dibromoethane (EDB)	0.0022U	mg/kg	0.0042	0.0022	1		04/12/12 18:44	106-93-4	
1,2-Dichlorobenzene	0.00091U	mg/kg	0.0042	0.00091	1		04/12/12 18:44	95-50-1	
1,3-Dichlorobenzene	0.0011U	mg/kg	0.0042	0.0011	1		04/12/12 18:44	541-73-1	
1,4-Dichlorobenzene	0.0010U	mg/kg	0.0042	0.0010	1		04/12/12 18:44	106-46-7	
1,1-Dichloroethane	0.00066U	mg/kg	0.0042	0.00066	1		04/12/12 18:44	75-34-3	
1,2-Dichloroethane	0.00076U	mg/kg	0.0042	0.00076	1		04/12/12 18:44	107-06-2	
1,2-Dichloroethene (Total)	0.0027U	mg/kg	0.0084	0.0027	1		04/12/12 18:44	540-59-0	
1,1-Dichloroethene	0.00068U	mg/kg	0.0042	0.00068	1		04/12/12 18:44	75-35-4	
cis-1,2-Dichloroethene	0.0021U	mg/kg	0.0042	0.0021	1		04/12/12 18:44	156-59-2	
trans-1,2-Dichloroethene	0.00069U	mg/kg	0.0042	0.00069	1		04/12/12 18:44	156-60-5	
1,2-Dichloropropane	0.0014U	mg/kg	0.0042	0.0014	1		04/12/12 18:44	78-87-5	
cis-1,3-Dichloropropene	0.0013U	mg/kg	0.0042	0.0013	1		04/12/12 18:44	10061-01-5	
trans-1,3-Dichloropropene	0.0014U	mg/kg	0.0042	0.0014	1		04/12/12 18:44	10061-02-6	
Ethylbenzene	0.0022U	mg/kg	0.0042	0.0022	1		04/12/12 18:44	100-41-4	
2-Hexanone	0.00099U	mg/kg	0.0084	0.00099	1		04/12/12 18:44	591-78-6	
Isopropylbenzene (Cumene)	0.00089U	mg/kg	0.0042	0.00089	1		04/12/12 18:44	98-82-8	
Methylene Chloride	0.0011U	mg/kg	0.0042	0.0011	1		04/12/12 18:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.00086U	mg/kg	0.0084	0.00086	1		04/12/12 18:44	108-10-1	
Methyl-tert-butyl ether	0.00060U	mg/kg	0.0042	0.00060	1		04/12/12 18:44	1634-04-4	
Naphthalene	0.0021U	mg/kg	0.0042	0.0021	1		04/12/12 18:44	91-20-3	
Styrene	0.00093U	mg/kg	0.0042	0.00093	1		04/12/12 18:44	100-42-5	
1,1,2,2-Tetrachloroethane	0.00074U	mg/kg	0.0042	0.00074	1		04/12/12 18:44	79-34-5	
Tetrachloroethene	0.00061U	mg/kg	0.0042	0.00061	1		04/12/12 18:44	127-18-4	
Toluene	0.00088J	mg/kg	0.0042	0.00054	1		04/12/12 18:44	108-88-3	
1,1,1-Trichloroethane	0.0022U	mg/kg	0.0042	0.0022	1		04/12/12 18:44	71-55-6	
1,1,2-Trichloroethane	0.00077U	mg/kg	0.0042	0.00077	1		04/12/12 18:44	79-00-5	
Trichloroethene	0.00063U	mg/kg	0.0042	0.00063	1		04/12/12 18:44	79-01-6	
1,2,4-Trimethylbenzene	0.00097U	mg/kg	0.0042	0.00097	1		04/12/12 18:44	95-63-6	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 13 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-E9-S-2-4 **Lab ID: 3067122004** Collected: 04/09/12 09:45 Received: 04/10/12 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0011U	mg/kg	0.0042	0.0011	1		04/12/12 18:44	108-67-8	
Vinyl chloride	0.00068U	mg/kg	0.0042	0.00068	1		04/12/12 18:44	75-01-4	
Xylene (Total)	0.0026U	mg/kg	0.013	0.0026	1		04/12/12 18:44	1330-20-7	
m&p-Xylene	0.0016U	mg/kg	0.0084	0.0016	1		04/12/12 18:44	179601-23-1	
o-Xylene	0.00095U	mg/kg	0.0042	0.00095	1		04/12/12 18:44	95-47-6	
Surrogates									
Toluene-d8 (S)	94 %		70-130		1		04/12/12 18:44	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130		1		04/12/12 18:44	460-00-4	
1,2-Dichloroethane-d4 (S)	101 %		70-130		1		04/12/12 18:44	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	8.1	%	0.10	0.10	1		04/20/12 15:48		

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-H6-S-14-16 Lab ID: 3067122005 Collected: 04/06/12 13:13 Received: 04/10/12 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	15.2	mg/kg	0.37	0.31	1	04/16/12 10:55	04/17/12 09:09	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	0.0029J	mg/kg	0.0082	0.0016	1		04/12/12 19:07	67-64-1	
Benzene	0.0059	mg/kg	0.0041	0.00064	1		04/12/12 19:07	71-43-2	
Bromodichloromethane	0.0015U	mg/kg	0.0041	0.0015	1		04/12/12 19:07	75-27-4	
Bromoform	0.0021U	mg/kg	0.0041	0.0021	1		04/12/12 19:07	75-25-2	
Bromomethane	0.0024U	mg/kg	0.0041	0.0024	1		04/12/12 19:07	74-83-9	
TOTAL BTEX	0.0059J	mg/kg	0.025	0.0058	1		04/12/12 19:07		
2-Butanone (MEK)	0.0010U	mg/kg	0.0082	0.0010	1		04/12/12 19:07	78-93-3	
Carbon disulfide	0.0021J	mg/kg	0.0041	0.00063	1		04/12/12 19:07	75-15-0	
Carbon tetrachloride	0.00073U	mg/kg	0.0041	0.00073	1		04/12/12 19:07	56-23-5	
Chlorobenzene	0.00081U	mg/kg	0.0041	0.00081	1		04/12/12 19:07	108-90-7	
Chloroethane	0.0013U	mg/kg	0.0041	0.0013	1		04/12/12 19:07	75-00-3	
Chloroform	0.00058U	mg/kg	0.0041	0.00058	1		04/12/12 19:07	67-66-3	
Chloromethane	0.00086U	mg/kg	0.0041	0.00086	1		04/12/12 19:07	74-87-3	
Dibromochloromethane	0.0013U	mg/kg	0.0041	0.0013	1		04/12/12 19:07	124-48-1	
1,2-Dibromoethane (EDB)	0.0021U	mg/kg	0.0041	0.0021	1		04/12/12 19:07	106-93-4	
1,2-Dichlorobenzene	0.00089U	mg/kg	0.0041	0.00089	1		04/12/12 19:07	95-50-1	
1,3-Dichlorobenzene	0.0010U	mg/kg	0.0041	0.0010	1		04/12/12 19:07	541-73-1	
1,4-Dichlorobenzene	0.0010U	mg/kg	0.0041	0.0010	1		04/12/12 19:07	106-46-7	
1,1-Dichloroethane	0.00065U	mg/kg	0.0041	0.00065	1		04/12/12 19:07	75-34-3	
1,2-Dichloroethane	0.00075U	mg/kg	0.0041	0.00075	1		04/12/12 19:07	107-06-2	
1,2-Dichloroethene (Total)	0.0027U	mg/kg	0.0082	0.0027	1		04/12/12 19:07	540-59-0	
1,1-Dichloroethene	0.00067U	mg/kg	0.0041	0.00067	1		04/12/12 19:07	75-35-4	
cis-1,2-Dichloroethene	0.0020U	mg/kg	0.0041	0.0020	1		04/12/12 19:07	156-59-2	
trans-1,2-Dichloroethene	0.00067U	mg/kg	0.0041	0.00067	1		04/12/12 19:07	156-60-5	
1,2-Dichloropropane	0.0013U	mg/kg	0.0041	0.0013	1		04/12/12 19:07	78-87-5	
cis-1,3-Dichloropropene	0.0013U	mg/kg	0.0041	0.0013	1		04/12/12 19:07	10061-01-5	
trans-1,3-Dichloropropene	0.0013U	mg/kg	0.0041	0.0013	1		04/12/12 19:07	10061-02-6	
Ethylbenzene	0.0021U	mg/kg	0.0041	0.0021	1		04/12/12 19:07	100-41-4	
2-Hexanone	0.00097U	mg/kg	0.0082	0.00097	1		04/12/12 19:07	591-78-6	
Isopropylbenzene (Cumene)	0.00087U	mg/kg	0.0041	0.00087	1		04/12/12 19:07	98-82-8	
Methylene Chloride	0.0011U	mg/kg	0.0041	0.0011	1		04/12/12 19:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.00085U	mg/kg	0.0082	0.00085	1		04/12/12 19:07	108-10-1	
Methyl-tert-butyl ether	0.00058U	mg/kg	0.0041	0.00058	1		04/12/12 19:07	1634-04-4	
Naphthalene	0.0021U	mg/kg	0.0041	0.0021	1		04/12/12 19:07	91-20-3	
Styrene	0.00091U	mg/kg	0.0041	0.00091	1		04/12/12 19:07	100-42-5	
1,1,2,2-Tetrachloroethane	0.00073U	mg/kg	0.0041	0.00073	1		04/12/12 19:07	79-34-5	
Tetrachloroethene	0.00060U	mg/kg	0.0041	0.00060	1		04/12/12 19:07	127-18-4	
Toluene	0.0011J	mg/kg	0.0041	0.00053	1		04/12/12 19:07	108-88-3	
1,1,1-Trichloroethane	0.0021U	mg/kg	0.0041	0.0021	1		04/12/12 19:07	71-55-6	
1,1,2-Trichloroethane	0.00076U	mg/kg	0.0041	0.00076	1		04/12/12 19:07	79-00-5	
Trichloroethene	0.00062U	mg/kg	0.0041	0.00062	1		04/12/12 19:07	79-01-6	
1,2,4-Trimethylbenzene	0.00095U	mg/kg	0.0041	0.00095	1		04/12/12 19:07	95-63-6	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 15 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-H6-S-14-16 **Lab ID:** 3067122005 Collected: 04/06/12 13:13 Received: 04/10/12 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0011U	mg/kg	0.0041	0.0011	1		04/12/12 19:07	108-67-8	
Vinyl chloride	0.00066U	mg/kg	0.0041	0.00066	1		04/12/12 19:07	75-01-4	
Xylene (Total)	0.0025U	mg/kg	0.012	0.0025	1		04/12/12 19:07	1330-20-7	
m&p-Xylene	0.0016U	mg/kg	0.0082	0.0016	1		04/12/12 19:07	179601-23-1	
o-Xylene	0.00093U	mg/kg	0.0041	0.00093	1		04/12/12 19:07	95-47-6	
Surrogates									
Toluene-d8 (S)	92	%	70-130		1		04/12/12 19:07	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130		1		04/12/12 19:07	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		04/12/12 19:07	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	10.3	%	0.10	0.10	1		04/20/12 15:48		

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-L2-S-6-8 Lab ID: 3067341001 Collected: 04/11/12 12:18 Received: 04/12/12 17:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	26.9	mg/kg	0.53	0.45	1	04/18/12 10:05	04/19/12 10:40	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.024	mg/kg	0.0096	0.0019	1		04/13/12 12:27	67-64-1	
Benzene	0.00093J	mg/kg	0.0048	0.00075	1		04/13/12 12:27	71-43-2	
Bromodichloromethane	0.0017U	mg/kg	0.0048	0.0017	1		04/13/12 12:27	75-27-4	
Bromoform	0.0024U	mg/kg	0.0048	0.0024	1		04/13/12 12:27	75-25-2	
Bromomethane	0.0028U	mg/kg	0.0048	0.0028	1		04/13/12 12:27	74-83-9	
TOTAL BTEX	0.0068U	mg/kg	0.029	0.0068	1		04/13/12 12:27		
2-Butanone (MEK)	0.0066J	mg/kg	0.0096	0.0012	1		04/13/12 12:27	78-93-3	
Carbon disulfide	0.0035J	mg/kg	0.0048	0.00074	1		04/13/12 12:27	75-15-0	
Carbon tetrachloride	0.00085U	mg/kg	0.0048	0.00085	1		04/13/12 12:27	56-23-5	
Chlorobenzene	0.00095U	mg/kg	0.0048	0.00095	1		04/13/12 12:27	108-90-7	
Chloroethane	0.0016U	mg/kg	0.0048	0.0016	1		04/13/12 12:27	75-00-3	
Chloroform	0.00068U	mg/kg	0.0048	0.00068	1		04/13/12 12:27	67-66-3	
Chloromethane	0.0010U	mg/kg	0.0048	0.0010	1		04/13/12 12:27	74-87-3	
Dibromochloromethane	0.0015U	mg/kg	0.0048	0.0015	1		04/13/12 12:27	124-48-1	
1,2-Dibromoethane (EDB)	0.0025U	mg/kg	0.0048	0.0025	1		04/13/12 12:27	106-93-4	
1,2-Dichlorobenzene	0.0010U	mg/kg	0.0048	0.0010	1		04/13/12 12:27	95-50-1	
1,3-Dichlorobenzene	0.0012U	mg/kg	0.0048	0.0012	1		04/13/12 12:27	541-73-1	
1,4-Dichlorobenzene	0.0012U	mg/kg	0.0048	0.0012	1		04/13/12 12:27	106-46-7	
1,1-Dichloroethane	0.00076U	mg/kg	0.0048	0.00076	1		04/13/12 12:27	75-34-3	
1,2-Dichloroethane	0.00087U	mg/kg	0.0048	0.00087	1		04/13/12 12:27	107-06-2	
1,2-Dichloroethene (Total)	0.0031U	mg/kg	0.0096	0.0031	1		04/13/12 12:27	540-59-0	
1,1-Dichloroethene	0.00078U	mg/kg	0.0048	0.00078	1		04/13/12 12:27	75-35-4	
cis-1,2-Dichloroethene	0.0024U	mg/kg	0.0048	0.0024	1		04/13/12 12:27	156-59-2	
trans-1,2-Dichloroethene	0.00079U	mg/kg	0.0048	0.00079	1		04/13/12 12:27	156-60-5	
1,2-Dichloropropane	0.0016U	mg/kg	0.0048	0.0016	1		04/13/12 12:27	78-87-5	
cis-1,3-Dichloropropene	0.0015U	mg/kg	0.0048	0.0015	1		04/13/12 12:27	10061-01-5	
trans-1,3-Dichloropropene	0.0016U	mg/kg	0.0048	0.0016	1		04/13/12 12:27	10061-02-6	
Ethylbenzene	0.0025U	mg/kg	0.0048	0.0025	1		04/13/12 12:27	100-41-4	
2-Hexanone	0.0011U	mg/kg	0.0096	0.0011	1		04/13/12 12:27	591-78-6	
Isopropylbenzene (Cumene)	0.0010U	mg/kg	0.0048	0.0010	1		04/13/12 12:27	98-82-8	
Methylene Chloride	0.0013U	mg/kg	0.0048	0.0013	1		04/13/12 12:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.00099U	mg/kg	0.0096	0.00099	1		04/13/12 12:27	108-10-1	
Methyl-tert-butyl ether	0.00068U	mg/kg	0.0048	0.00068	1		04/13/12 12:27	1634-04-4	
Naphthalene	0.0024U	mg/kg	0.0048	0.0024	1		04/13/12 12:27	91-20-3	
Styrene	0.0011U	mg/kg	0.0048	0.0011	1		04/13/12 12:27	100-42-5	
1,1,2,2-Tetrachloroethane	0.00085U	mg/kg	0.0048	0.00085	1		04/13/12 12:27	79-34-5	
Tetrachloroethene	0.00070U	mg/kg	0.0048	0.00070	1		04/13/12 12:27	127-18-4	
Toluene	0.00074J	mg/kg	0.0048	0.00062	1		04/13/12 12:27	108-88-3	
1,1,1-Trichloroethane	0.0025U	mg/kg	0.0048	0.0025	1		04/13/12 12:27	71-55-6	
1,1,2-Trichloroethane	0.00088U	mg/kg	0.0048	0.00088	1		04/13/12 12:27	79-00-5	
Trichloroethene	0.00073U	mg/kg	0.0048	0.00073	1		04/13/12 12:27	79-01-6	
1,2,4-Trimethylbenzene	0.0011U	mg/kg	0.0048	0.0011	1		04/13/12 12:27	95-63-6	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 17 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-L2-S-6-8 **Lab ID: 3067341001** Collected: 04/11/12 12:18 Received: 04/12/12 17:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0013U	mg/kg	0.0048	0.0013	1		04/13/12 12:27	108-67-8	
Vinyl chloride	0.00078U	mg/kg	0.0048	0.00078	1		04/13/12 12:27	75-01-4	
Xylene (Total)	0.0029U	mg/kg	0.014	0.0029	1		04/13/12 12:27	1330-20-7	
m&p-Xylene	0.0019U	mg/kg	0.0096	0.0019	1		04/13/12 12:27	179601-23-1	
o-Xylene	0.0011U	mg/kg	0.0048	0.0011	1		04/13/12 12:27	95-47-6	
Surrogates									
Toluene-d8 (S)	93 %		70-130		1		04/13/12 12:27	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130		1		04/13/12 12:27	460-00-4	
1,2-Dichloroethane-d4 (S)	101 %		70-130		1		04/13/12 12:27	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	14.7	%	0.10	0.10	1		04/20/12 15:50		

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: DUP-2 Lab ID: 3067341002 Collected: Received: 04/12/12 17:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	25.3	mg/kg	0.55	0.46	1	04/18/12 10:05	04/19/12 10:52	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.023	mg/kg	0.0098	0.0019	1		04/13/12 12:50	67-64-1	
Benzene	0.0019J	mg/kg	0.0049	0.00076	1		04/13/12 12:50	71-43-2	
Bromodichloromethane	0.0018U	mg/kg	0.0049	0.0018	1		04/13/12 12:50	75-27-4	
Bromoform	0.0025U	mg/kg	0.0049	0.0025	1		04/13/12 12:50	75-25-2	
Bromomethane	0.0029U	mg/kg	0.0049	0.0029	1		04/13/12 12:50	74-83-9	
TOTAL BTEX	0.0069U	mg/kg	0.029	0.0069	1		04/13/12 12:50		
2-Butanone (MEK)	0.0093J	mg/kg	0.0098	0.0012	1		04/13/12 12:50	78-93-3	
Carbon disulfide	0.0042J	mg/kg	0.0049	0.00075	1		04/13/12 12:50	75-15-0	
Carbon tetrachloride	0.00087U	mg/kg	0.0049	0.00087	1		04/13/12 12:50	56-23-5	
Chlorobenzene	0.00097U	mg/kg	0.0049	0.00097	1		04/13/12 12:50	108-90-7	
Chloroethane	0.0016U	mg/kg	0.0049	0.0016	1		04/13/12 12:50	75-00-3	
Chloroform	0.00069U	mg/kg	0.0049	0.00069	1		04/13/12 12:50	67-66-3	
Chloromethane	0.0010U	mg/kg	0.0049	0.0010	1		04/13/12 12:50	74-87-3	
Dibromochloromethane	0.0015U	mg/kg	0.0049	0.0015	1		04/13/12 12:50	124-48-1	
1,2-Dibromoethane (EDB)	0.0025U	mg/kg	0.0049	0.0025	1		04/13/12 12:50	106-93-4	
1,2-Dichlorobenzene	0.0011U	mg/kg	0.0049	0.0011	1		04/13/12 12:50	95-50-1	
1,3-Dichlorobenzene	0.0012U	mg/kg	0.0049	0.0012	1		04/13/12 12:50	541-73-1	
1,4-Dichlorobenzene	0.0012U	mg/kg	0.0049	0.0012	1		04/13/12 12:50	106-46-7	
1,1-Dichloroethane	0.00077U	mg/kg	0.0049	0.00077	1		04/13/12 12:50	75-34-3	
1,2-Dichloroethane	0.00089U	mg/kg	0.0049	0.00089	1		04/13/12 12:50	107-06-2	
1,2-Dichloroethene (Total)	0.0032U	mg/kg	0.0098	0.0032	1		04/13/12 12:50	540-59-0	
1,1-Dichloroethene	0.00079U	mg/kg	0.0049	0.00079	1		04/13/12 12:50	75-35-4	
cis-1,2-Dichloroethene	0.0024U	mg/kg	0.0049	0.0024	1		04/13/12 12:50	156-59-2	
trans-1,2-Dichloroethene	0.00080U	mg/kg	0.0049	0.00080	1		04/13/12 12:50	156-60-5	
1,2-Dichloropropane	0.0016U	mg/kg	0.0049	0.0016	1		04/13/12 12:50	78-87-5	
cis-1,3-Dichloropropene	0.0015U	mg/kg	0.0049	0.0015	1		04/13/12 12:50	10061-01-5	
trans-1,3-Dichloropropene	0.0016U	mg/kg	0.0049	0.0016	1		04/13/12 12:50	10061-02-6	
Ethylbenzene	0.0025U	mg/kg	0.0049	0.0025	1		04/13/12 12:50	100-41-4	
2-Hexanone	0.0012U	mg/kg	0.0098	0.0012	1		04/13/12 12:50	591-78-6	
Isopropylbenzene (Cumene)	0.0010U	mg/kg	0.0049	0.0010	1		04/13/12 12:50	98-82-8	
Methylene Chloride	0.0013U	mg/kg	0.0049	0.0013	1		04/13/12 12:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.0010U	mg/kg	0.0098	0.0010	1		04/13/12 12:50	108-10-1	
Methyl-tert-butyl ether	0.00069U	mg/kg	0.0049	0.00069	1		04/13/12 12:50	1634-04-4	
Naphthalene	0.0025U	mg/kg	0.0049	0.0025	1		04/13/12 12:50	91-20-3	
Styrene	0.0011U	mg/kg	0.0049	0.0011	1		04/13/12 12:50	100-42-5	
1,1,2,2-Tetrachloroethane	0.00087U	mg/kg	0.0049	0.00087	1		04/13/12 12:50	79-34-5	
Tetrachloroethene	0.00071U	mg/kg	0.0049	0.00071	1		04/13/12 12:50	127-18-4	
Toluene	0.0014J	mg/kg	0.0049	0.00063	1		04/13/12 12:50	108-88-3	
1,1,1-Trichloroethane	0.0025U	mg/kg	0.0049	0.0025	1		04/13/12 12:50	71-55-6	
1,1,2-Trichloroethane	0.00090U	mg/kg	0.0049	0.00090	1		04/13/12 12:50	79-00-5	
Trichloroethene	0.00074U	mg/kg	0.0049	0.00074	1		04/13/12 12:50	79-01-6	
1,2,4-Trimethylbenzene	0.0011U	mg/kg	0.0049	0.0011	1		04/13/12 12:50	95-63-6	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 19 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: DUP-2 **Lab ID:** 3067341002 **Collected:** **Received:** 04/12/12 17:30 **Matrix:** Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0013U	mg/kg	0.0049	0.0013	1		04/13/12 12:50	108-67-8	
Vinyl chloride	0.00079U	mg/kg	0.0049	0.00079	1		04/13/12 12:50	75-01-4	
Xylene (Total)	0.0030U	mg/kg	0.015	0.0030	1		04/13/12 12:50	1330-20-7	
m&p-Xylene	0.0019U	mg/kg	0.0098	0.0019	1		04/13/12 12:50	179601-23-1	
o-Xylene	0.0011U	mg/kg	0.0049	0.0011	1		04/13/12 12:50	95-47-6	
Surrogates									
Toluene-d8 (S)	94 %		70-130		1		04/13/12 12:50	2037-26-5	
4-Bromofluorobenzene (S)	98 %		70-130		1		04/13/12 12:50	460-00-4	
1,2-Dichloroethane-d4 (S)	99 %		70-130		1		04/13/12 12:50	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	17.3	%	0.10	0.10	1		04/20/12 15:50		

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-A14-S-2-4 **Lab ID: 3067341003** Collected: 04/11/12 11:52 Received: 04/12/12 17:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	36.6	mg/kg	0.31	0.26	1	04/18/12 10:05	04/19/12 10:57	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	0.011	mg/kg	0.0086	0.0017	1		04/13/12 13:13	67-64-1	
Benzene	0.0064	mg/kg	0.0043	0.00067	1		04/13/12 13:13	71-43-2	
Bromodichloromethane	0.0016U	mg/kg	0.0043	0.0016	1		04/13/12 13:13	75-27-4	
Bromoform	0.0022U	mg/kg	0.0043	0.0022	1		04/13/12 13:13	75-25-2	
Bromomethane	0.0025U	mg/kg	0.0043	0.0025	1		04/13/12 13:13	74-83-9	
TOTAL BTEX	0.012J	mg/kg	0.026	0.0060	1		04/13/12 13:13		
2-Butanone (MEK)	0.0068J	mg/kg	0.0086	0.0011	1		04/13/12 13:13	78-93-3	
Carbon disulfide	0.00066U	mg/kg	0.0043	0.00066	1		04/13/12 13:13	75-15-0	
Carbon tetrachloride	0.00076U	mg/kg	0.0043	0.00076	1		04/13/12 13:13	56-23-5	
Chlorobenzene	0.00085U	mg/kg	0.0043	0.00085	1		04/13/12 13:13	108-90-7	
Chloroethane	0.0014U	mg/kg	0.0043	0.0014	1		04/13/12 13:13	75-00-3	
Chloroform	0.00061U	mg/kg	0.0043	0.00061	1		04/13/12 13:13	67-66-3	
Chloromethane	0.00090U	mg/kg	0.0043	0.00090	1		04/13/12 13:13	74-87-3	
Dibromochloromethane	0.0013U	mg/kg	0.0043	0.0013	1		04/13/12 13:13	124-48-1	
1,2-Dibromoethane (EDB)	0.0022U	mg/kg	0.0043	0.0022	1		04/13/12 13:13	106-93-4	
1,2-Dichlorobenzene	0.00093U	mg/kg	0.0043	0.00093	1		04/13/12 13:13	95-50-1	
1,3-Dichlorobenzene	0.0011U	mg/kg	0.0043	0.0011	1		04/13/12 13:13	541-73-1	
1,4-Dichlorobenzene	0.0010U	mg/kg	0.0043	0.0010	1		04/13/12 13:13	106-46-7	
1,1-Dichloroethane	0.00068U	mg/kg	0.0043	0.00068	1		04/13/12 13:13	75-34-3	
1,2-Dichloroethane	0.00078U	mg/kg	0.0043	0.00078	1		04/13/12 13:13	107-06-2	
1,2-Dichloroethene (Total)	0.0028U	mg/kg	0.0086	0.0028	1		04/13/12 13:13	540-59-0	
1,1-Dichloroethene	0.00070U	mg/kg	0.0043	0.00070	1		04/13/12 13:13	75-35-4	
cis-1,2-Dichloroethene	0.0021U	mg/kg	0.0043	0.0021	1		04/13/12 13:13	156-59-2	
trans-1,2-Dichloroethene	0.00070U	mg/kg	0.0043	0.00070	1		04/13/12 13:13	156-60-5	
1,2-Dichloropropane	0.0014U	mg/kg	0.0043	0.0014	1		04/13/12 13:13	78-87-5	
cis-1,3-Dichloropropene	0.0013U	mg/kg	0.0043	0.0013	1		04/13/12 13:13	10061-01-5	
trans-1,3-Dichloropropene	0.0014U	mg/kg	0.0043	0.0014	1		04/13/12 13:13	10061-02-6	
Ethylbenzene	0.0022U	mg/kg	0.0043	0.0022	1		04/13/12 13:13	100-41-4	
2-Hexanone	0.0010U	mg/kg	0.0086	0.0010	1		04/13/12 13:13	591-78-6	
Isopropylbenzene (Cumene)	0.00091U	mg/kg	0.0043	0.00091	1		04/13/12 13:13	98-82-8	
Methylene Chloride	0.0011U	mg/kg	0.0043	0.0011	1		04/13/12 13:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.00088U	mg/kg	0.0086	0.00088	1		04/13/12 13:13	108-10-1	
Methyl-tert-butyl ether	0.00061U	mg/kg	0.0043	0.00061	1		04/13/12 13:13	1634-04-4	
Naphthalene	0.0022U	mg/kg	0.0043	0.0022	1		04/13/12 13:13	91-20-3	
Styrene	0.00095U	mg/kg	0.0043	0.00095	1		04/13/12 13:13	100-42-5	
1,1,2,2-Tetrachloroethane	0.00076U	mg/kg	0.0043	0.00076	1		04/13/12 13:13	79-34-5	
Tetrachloroethene	0.00062U	mg/kg	0.0043	0.00062	1		04/13/12 13:13	127-18-4	
Toluene	0.0059	mg/kg	0.0043	0.00055	1		04/13/12 13:13	108-88-3	
1,1,1-Trichloroethane	0.0022U	mg/kg	0.0043	0.0022	1		04/13/12 13:13	71-55-6	
1,1,2-Trichloroethane	0.00079U	mg/kg	0.0043	0.00079	1		04/13/12 13:13	79-00-5	
Trichloroethene	0.00065U	mg/kg	0.0043	0.00065	1		04/13/12 13:13	79-01-6	
1,2,4-Trimethylbenzene	0.00099U	mg/kg	0.0043	0.00099	1		04/13/12 13:13	95-63-6	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 21 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-A14-S-2-4 **Lab ID: 3067341003** Collected: 04/11/12 11:52 Received: 04/12/12 17:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0012U	mg/kg	0.0043	0.0012	1		04/13/12 13:13	108-67-8	
Vinyl chloride	0.00069U	mg/kg	0.0043	0.00069	1		04/13/12 13:13	75-01-4	
Xylene (Total)	0.0026U	mg/kg	0.013	0.0026	1		04/13/12 13:13	1330-20-7	
m&p-Xylene	0.0017U	mg/kg	0.0086	0.0017	1		04/13/12 13:13	179601-23-1	
o-Xylene	0.00097U	mg/kg	0.0043	0.00097	1		04/13/12 13:13	95-47-6	
Surrogates									
Toluene-d8 (S)	94	%	70-130		1		04/13/12 13:13	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130		1		04/13/12 13:13	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130		1		04/13/12 13:13	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	9.1	%	0.10	0.10	1		04/20/12 15:51		

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-A10-S-2-4 Lab ID: 3067341004 Collected: 04/11/12 10:42 Received: 04/12/12 17:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	14.2	mg/kg	0.40	0.34	1	04/18/12 10:05	04/19/12 11:01	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	0.0025U	mg/kg	0.013	0.0025	1		04/13/12 13:37	67-64-1	
Benzene	0.0013J	mg/kg	0.0065	0.0010	1		04/13/12 13:37	71-43-2	
Bromodichloromethane	0.0024U	mg/kg	0.0065	0.0024	1		04/13/12 13:37	75-27-4	
Bromoform	0.0033U	mg/kg	0.0065	0.0033	1		04/13/12 13:37	75-25-2	
Bromomethane	0.0038U	mg/kg	0.0065	0.0038	1		04/13/12 13:37	74-83-9	
TOTAL BTEX	0.0092U	mg/kg	0.039	0.0092	1		04/13/12 13:37		
2-Butanone (MEK)	0.0016U	mg/kg	0.013	0.0016	1		04/13/12 13:37	78-93-3	
Carbon disulfide	0.091	mg/kg	0.0065	0.0010	1		04/13/12 13:37	75-15-0	
Carbon tetrachloride	0.0012U	mg/kg	0.0065	0.0012	1		04/13/12 13:37	56-23-5	
Chlorobenzene	0.0013U	mg/kg	0.0065	0.0013	1		04/13/12 13:37	108-90-7	
Chloroethane	0.0021U	mg/kg	0.0065	0.0021	1		04/13/12 13:37	75-00-3	
Chloroform	0.00092U	mg/kg	0.0065	0.00092	1		04/13/12 13:37	67-66-3	
Chloromethane	0.0014U	mg/kg	0.0065	0.0014	1		04/13/12 13:37	74-87-3	
Dibromochloromethane	0.0020U	mg/kg	0.0065	0.0020	1		04/13/12 13:37	124-48-1	
1,2-Dibromoethane (EDB)	0.0034U	mg/kg	0.0065	0.0034	1		04/13/12 13:37	106-93-4	
1,2-Dichlorobenzene	0.0014U	mg/kg	0.0065	0.0014	1		04/13/12 13:37	95-50-1	
1,3-Dichlorobenzene	0.0017U	mg/kg	0.0065	0.0017	1		04/13/12 13:37	541-73-1	
1,4-Dichlorobenzene	0.0016U	mg/kg	0.0065	0.0016	1		04/13/12 13:37	106-46-7	
1,1-Dichloroethane	0.0010U	mg/kg	0.0065	0.0010	1		04/13/12 13:37	75-34-3	
1,2-Dichloroethane	0.0012U	mg/kg	0.0065	0.0012	1		04/13/12 13:37	107-06-2	
1,2-Dichloroethene (Total)	0.0043U	mg/kg	0.013	0.0043	1		04/13/12 13:37	540-59-0	
1,1-Dichloroethene	0.0011U	mg/kg	0.0065	0.0011	1		04/13/12 13:37	75-35-4	
cis-1,2-Dichloroethene	0.0032U	mg/kg	0.0065	0.0032	1		04/13/12 13:37	156-59-2	
trans-1,2-Dichloroethene	0.0011U	mg/kg	0.0065	0.0011	1		04/13/12 13:37	156-60-5	
1,2-Dichloropropane	0.0021U	mg/kg	0.0065	0.0021	1		04/13/12 13:37	78-87-5	
cis-1,3-Dichloropropene	0.0020U	mg/kg	0.0065	0.0020	1		04/13/12 13:37	10061-01-5	
trans-1,3-Dichloropropene	0.0021U	mg/kg	0.0065	0.0021	1		04/13/12 13:37	10061-02-6	
Ethylbenzene	0.0033U	mg/kg	0.0065	0.0033	1		04/13/12 13:37	100-41-4	
2-Hexanone	0.0015U	mg/kg	0.013	0.0015	1		04/13/12 13:37	591-78-6	
Isopropylbenzene (Cumene)	0.0014U	mg/kg	0.0065	0.0014	1		04/13/12 13:37	98-82-8	
Methylene Chloride	0.0017U	mg/kg	0.0065	0.0017	1		04/13/12 13:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.0013U	mg/kg	0.013	0.0013	1		04/13/12 13:37	108-10-1	
Methyl-tert-butyl ether	0.00092U	mg/kg	0.0065	0.00092	1		04/13/12 13:37	1634-04-4	
Naphthalene	0.0033U	mg/kg	0.0065	0.0033	1		04/13/12 13:37	91-20-3	
Styrene	0.0014U	mg/kg	0.0065	0.0014	1		04/13/12 13:37	100-42-5	
1,1,2,2-Tetrachloroethane	0.0012U	mg/kg	0.0065	0.0012	1		04/13/12 13:37	79-34-5	
Tetrachloroethene	0.00094U	mg/kg	0.0065	0.00094	1		04/13/12 13:37	127-18-4	
Toluene	0.00084U	mg/kg	0.0065	0.00084	1		04/13/12 13:37	108-88-3	
1,1,1-Trichloroethane	0.0034U	mg/kg	0.0065	0.0034	1		04/13/12 13:37	71-55-6	
1,1,2-Trichloroethane	0.0012U	mg/kg	0.0065	0.0012	1		04/13/12 13:37	79-00-5	
Trichloroethene	0.00098U	mg/kg	0.0065	0.00098	1		04/13/12 13:37	79-01-6	
1,2,4-Trimethylbenzene	0.0015U	mg/kg	0.0065	0.0015	1		04/13/12 13:37	95-63-6	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 23 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-A10-S-2-4 **Lab ID: 3067341004** Collected: 04/11/12 10:42 Received: 04/12/12 17:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0018U	mg/kg	0.0065	0.0018	1		04/13/12 13:37	108-67-8	
Vinyl chloride	0.0011U	mg/kg	0.0065	0.0011	1		04/13/12 13:37	75-01-4	
Xylene (Total)	0.0040U	mg/kg	0.020	0.0040	1		04/13/12 13:37	1330-20-7	
m&p-Xylene	0.0025U	mg/kg	0.013	0.0025	1		04/13/12 13:37	179601-23-1	
o-Xylene	0.0015U	mg/kg	0.0065	0.0015	1		04/13/12 13:37	95-47-6	
Surrogates									
Toluene-d8 (S)	94 %		70-130		1		04/13/12 13:37	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130		1		04/13/12 13:37	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		70-130		1		04/13/12 13:37	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	6.7	%	0.10	0.10	1		04/20/12 15:51		

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-B13-S-2-4 Lab ID: 3067341005 Collected: 04/11/12 09:28 Received: 04/12/12 17:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	19.0	mg/kg	0.29	0.24	1	04/18/12 10:05	04/19/12 11:05	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	0.0081J	mg/kg	0.0096	0.0019	1		04/13/12 14:00	67-64-1	
Benzene	0.00086J	mg/kg	0.0048	0.00075	1		04/13/12 14:00	71-43-2	
Bromodichloromethane	0.0017U	mg/kg	0.0048	0.0017	1		04/13/12 14:00	75-27-4	
Bromoform	0.0024U	mg/kg	0.0048	0.0024	1		04/13/12 14:00	75-25-2	
Bromomethane	0.0028U	mg/kg	0.0048	0.0028	1		04/13/12 14:00	74-83-9	
TOTAL BTEX	0.0068U	mg/kg	0.029	0.0068	1		04/13/12 14:00		
2-Butanone (MEK)	0.0012U	mg/kg	0.0096	0.0012	1		04/13/12 14:00	78-93-3	
Carbon disulfide	0.019	mg/kg	0.0048	0.00074	1		04/13/12 14:00	75-15-0	
Carbon tetrachloride	0.00086U	mg/kg	0.0048	0.00086	1		04/13/12 14:00	56-23-5	
Chlorobenzene	0.00095U	mg/kg	0.0048	0.00095	1		04/13/12 14:00	108-90-7	
Chloroethane	0.0016U	mg/kg	0.0048	0.0016	1		04/13/12 14:00	75-00-3	
Chloroform	0.00069U	mg/kg	0.0048	0.00069	1		04/13/12 14:00	67-66-3	
Chloromethane	0.0010U	mg/kg	0.0048	0.0010	1		04/13/12 14:00	74-87-3	
Dibromochloromethane	0.0015U	mg/kg	0.0048	0.0015	1		04/13/12 14:00	124-48-1	
1,2-Dibromoethane (EDB)	0.0025U	mg/kg	0.0048	0.0025	1		04/13/12 14:00	106-93-4	
1,2-Dichlorobenzene	0.0011U	mg/kg	0.0048	0.0011	1		04/13/12 14:00	95-50-1	
1,3-Dichlorobenzene	0.0012U	mg/kg	0.0048	0.0012	1		04/13/12 14:00	541-73-1	
1,4-Dichlorobenzene	0.0012U	mg/kg	0.0048	0.0012	1		04/13/12 14:00	106-46-7	
1,1-Dichloroethane	0.00076U	mg/kg	0.0048	0.00076	1		04/13/12 14:00	75-34-3	
1,2-Dichloroethane	0.00088U	mg/kg	0.0048	0.00088	1		04/13/12 14:00	107-06-2	
1,2-Dichloroethene (Total)	0.0032U	mg/kg	0.0096	0.0032	1		04/13/12 14:00	540-59-0	
1,1-Dichloroethene	0.00078U	mg/kg	0.0048	0.00078	1		04/13/12 14:00	75-35-4	
cis-1,2-Dichloroethene	0.0024U	mg/kg	0.0048	0.0024	1		04/13/12 14:00	156-59-2	
trans-1,2-Dichloroethene	0.00079U	mg/kg	0.0048	0.00079	1		04/13/12 14:00	156-60-5	
1,2-Dichloropropane	0.0016U	mg/kg	0.0048	0.0016	1		04/13/12 14:00	78-87-5	
cis-1,3-Dichloropropene	0.0015U	mg/kg	0.0048	0.0015	1		04/13/12 14:00	10061-01-5	
trans-1,3-Dichloropropene	0.0016U	mg/kg	0.0048	0.0016	1		04/13/12 14:00	10061-02-6	
Ethylbenzene	0.0025U	mg/kg	0.0048	0.0025	1		04/13/12 14:00	100-41-4	
2-Hexanone	0.0011U	mg/kg	0.0096	0.0011	1		04/13/12 14:00	591-78-6	
Isopropylbenzene (Cumene)	0.0010U	mg/kg	0.0048	0.0010	1		04/13/12 14:00	98-82-8	
Methylene Chloride	0.0013U	mg/kg	0.0048	0.0013	1		04/13/12 14:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.00099U	mg/kg	0.0096	0.00099	1		04/13/12 14:00	108-10-1	
Methyl-tert-butyl ether	0.00069U	mg/kg	0.0048	0.00069	1		04/13/12 14:00	1634-04-4	
Naphthalene	0.0024U	mg/kg	0.0048	0.0024	1		04/13/12 14:00	91-20-3	
Styrene	0.0011U	mg/kg	0.0048	0.0011	1		04/13/12 14:00	100-42-5	
1,1,2,2-Tetrachloroethane	0.00085U	mg/kg	0.0048	0.00085	1		04/13/12 14:00	79-34-5	
Tetrachloroethene	0.00070U	mg/kg	0.0048	0.00070	1		04/13/12 14:00	127-18-4	
Toluene	0.00066J	mg/kg	0.0048	0.00062	1		04/13/12 14:00	108-88-3	
1,1,1-Trichloroethane	0.0025U	mg/kg	0.0048	0.0025	1		04/13/12 14:00	71-55-6	
1,1,2-Trichloroethane	0.00089U	mg/kg	0.0048	0.00089	1		04/13/12 14:00	79-00-5	
Trichloroethene	0.00073U	mg/kg	0.0048	0.00073	1		04/13/12 14:00	79-01-6	
1,2,4-Trimethylbenzene	0.0011U	mg/kg	0.0048	0.0011	1		04/13/12 14:00	95-63-6	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 25 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-B13-S-2-4 **Lab ID: 3067341005** Collected: 04/11/12 09:28 Received: 04/12/12 17:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0013U	mg/kg	0.0048	0.0013	1		04/13/12 14:00	108-67-8	
Vinyl chloride	0.00078U	mg/kg	0.0048	0.00078	1		04/13/12 14:00	75-01-4	
Xylene (Total)	0.0029U	mg/kg	0.014	0.0029	1		04/13/12 14:00	1330-20-7	
m&p-Xylene	0.0019U	mg/kg	0.0096	0.0019	1		04/13/12 14:00	179601-23-1	
o-Xylene	0.0011U	mg/kg	0.0048	0.0011	1		04/13/12 14:00	95-47-6	
Surrogates									
Toluene-d8 (S)	95 %		70-130		1		04/13/12 14:00	2037-26-5	
4-Bromofluorobenzene (S)	98 %		70-130		1		04/13/12 14:00	460-00-4	
1,2-Dichloroethane-d4 (S)	98 %		70-130		1		04/13/12 14:00	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	10.5	%	0.10	0.10	1		04/20/12 15:51		

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-A11-S-2-4 **Lab ID: 3067341006** Collected: 04/12/12 10:13 Received: 04/12/12 17:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	11.8	mg/kg	0.30	0.25	1	04/18/12 10:05	04/19/12 11:09	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.0019U	mg/kg	0.0099	0.0019	1		04/13/12 14:23	67-64-1	
Benzene	0.0036J	mg/kg	0.0050	0.00077	1		04/13/12 14:23	71-43-2	
Bromodichloromethane	0.0018U	mg/kg	0.0050	0.0018	1		04/13/12 14:23	75-27-4	
Bromoform	0.0025U	mg/kg	0.0050	0.0025	1		04/13/12 14:23	75-25-2	
Bromomethane	0.0029U	mg/kg	0.0050	0.0029	1		04/13/12 14:23	74-83-9	
TOTAL BTEX	0.0070U	mg/kg	0.030	0.0070	1		04/13/12 14:23		
2-Butanone (MEK)	0.0013U	mg/kg	0.0099	0.0013	1		04/13/12 14:23	78-93-3	
Carbon disulfide	0.0022J	mg/kg	0.0050	0.00076	1		04/13/12 14:23	75-15-0	
Carbon tetrachloride	0.00088U	mg/kg	0.0050	0.00088	1		04/13/12 14:23	56-23-5	
Chlorobenzene	0.00098U	mg/kg	0.0050	0.00098	1		04/13/12 14:23	108-90-7	
Chloroethane	0.0016U	mg/kg	0.0050	0.0016	1		04/13/12 14:23	75-00-3	
Chloroform	0.00071U	mg/kg	0.0050	0.00071	1		04/13/12 14:23	67-66-3	
Chloromethane	0.0010U	mg/kg	0.0050	0.0010	1		04/13/12 14:23	74-87-3	
Dibromochloromethane	0.0015U	mg/kg	0.0050	0.0015	1		04/13/12 14:23	124-48-1	
1,2-Dibromoethane (EDB)	0.0026U	mg/kg	0.0050	0.0026	1		04/13/12 14:23	106-93-4	
1,2-Dichlorobenzene	0.0011U	mg/kg	0.0050	0.0011	1		04/13/12 14:23	95-50-1	
1,3-Dichlorobenzene	0.0013U	mg/kg	0.0050	0.0013	1		04/13/12 14:23	541-73-1	
1,4-Dichlorobenzene	0.0012U	mg/kg	0.0050	0.0012	1		04/13/12 14:23	106-46-7	
1,1-Dichloroethane	0.00079U	mg/kg	0.0050	0.00079	1		04/13/12 14:23	75-34-3	
1,2-Dichloroethane	0.00090U	mg/kg	0.0050	0.00090	1		04/13/12 14:23	107-06-2	
1,2-Dichloroethene (Total)	0.0033U	mg/kg	0.0099	0.0033	1		04/13/12 14:23	540-59-0	
1,1-Dichloroethene	0.00081U	mg/kg	0.0050	0.00081	1		04/13/12 14:23	75-35-4	
cis-1,2-Dichloroethene	0.0024U	mg/kg	0.0050	0.0024	1		04/13/12 14:23	156-59-2	
trans-1,2-Dichloroethene	0.00081U	mg/kg	0.0050	0.00081	1		04/13/12 14:23	156-60-5	
1,2-Dichloropropane	0.0016U	mg/kg	0.0050	0.0016	1		04/13/12 14:23	78-87-5	
cis-1,3-Dichloropropene	0.0016U	mg/kg	0.0050	0.0016	1		04/13/12 14:23	10061-01-5	
trans-1,3-Dichloropropene	0.0016U	mg/kg	0.0050	0.0016	1		04/13/12 14:23	10061-02-6	
Ethylbenzene	0.0026U	mg/kg	0.0050	0.0026	1		04/13/12 14:23	100-41-4	
2-Hexanone	0.0012U	mg/kg	0.0099	0.0012	1		04/13/12 14:23	591-78-6	
Isopropylbenzene (Cumene)	0.0011U	mg/kg	0.0050	0.0011	1		04/13/12 14:23	98-82-8	
Methylene Chloride	0.0013U	mg/kg	0.0050	0.0013	1		04/13/12 14:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.0010U	mg/kg	0.0099	0.0010	1		04/13/12 14:23	108-10-1	
Methyl-tert-butyl ether	0.00071U	mg/kg	0.0050	0.00071	1		04/13/12 14:23	1634-04-4	
Naphthalene	0.0025U	mg/kg	0.0050	0.0025	1		04/13/12 14:23	91-20-3	
Styrene	0.0011U	mg/kg	0.0050	0.0011	1		04/13/12 14:23	100-42-5	
1,1,2,2-Tetrachloroethane	0.00088U	mg/kg	0.0050	0.00088	1		04/13/12 14:23	79-34-5	
Tetrachloroethene	0.00072U	mg/kg	0.0050	0.00072	1		04/13/12 14:23	127-18-4	
Toluene	0.00070J	mg/kg	0.0050	0.00064	1		04/13/12 14:23	108-88-3	
1,1,1-Trichloroethane	0.0026U	mg/kg	0.0050	0.0026	1		04/13/12 14:23	71-55-6	
1,1,2-Trichloroethane	0.00091U	mg/kg	0.0050	0.00091	1		04/13/12 14:23	79-00-5	
Trichloroethene	0.00075U	mg/kg	0.0050	0.00075	1		04/13/12 14:23	79-01-6	
1,2,4-Trimethylbenzene	0.0012U	mg/kg	0.0050	0.0012	1		04/13/12 14:23	95-63-6	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 27 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Sample: TRAMP-A11-S-2-4 **Lab ID: 3067341006** Collected: 04/12/12 10:13 Received: 04/12/12 17:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0013U	mg/kg	0.0050	0.0013	1		04/13/12 14:23	108-67-8	
Vinyl chloride	0.00080U	mg/kg	0.0050	0.00080	1		04/13/12 14:23	75-01-4	
Xylene (Total)	0.0030U	mg/kg	0.015	0.0030	1		04/13/12 14:23	1330-20-7	
m&p-Xylene	0.0019U	mg/kg	0.0099	0.0019	1		04/13/12 14:23	179601-23-1	
o-Xylene	0.0011U	mg/kg	0.0050	0.0011	1		04/13/12 14:23	95-47-6	
Surrogates									
Toluene-d8 (S)	92 %		70-130		1		04/13/12 14:23	2037-26-5	
4-Bromofluorobenzene (S)	98 %		70-130		1		04/13/12 14:23	460-00-4	
1,2-Dichloroethane-d4 (S)	95 %		70-130		1		04/13/12 14:23	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	2.4	%	0.10	0.10	1		04/20/12 15:51		

QUALITY CONTROL DATA

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

QC Batch: MPRP/8129 Analysis Method: EPA 6010B
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 3067122001, 3067122002, 3067122003, 3067122004, 3067122005

METHOD BLANK: 430104 Matrix: Solid
Associated Lab Samples: 3067122001, 3067122002, 3067122003, 3067122004, 3067122005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	0.42U	0.50	04/17/12 08:42	

LABORATORY CONTROL SAMPLE: 430105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	49.5	99	80-120	

MATRIX SPIKE SAMPLE: 430107

Parameter	Units	3067122001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	17.2	43.8	66.6	113	80-120	

SAMPLE DUPLICATE: 430106

Parameter	Units	3067122001 Result	Dup Result	RPD	Max RPD	Qualifiers
Lead	mg/kg	17.2	16.5	4	20	

QUALITY CONTROL DATA

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

QC Batch: MPRP/8146 Analysis Method: EPA 6010B
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 3067341001, 3067341002, 3067341003, 3067341004, 3067341005, 3067341006

METHOD BLANK: 431013 Matrix: Solid
Associated Lab Samples: 3067341001, 3067341002, 3067341003, 3067341004, 3067341005, 3067341006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	0.42U	0.50	04/19/12 10:32	

LABORATORY CONTROL SAMPLE: 431014

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	46.7	93	80-120	

MATRIX SPIKE SAMPLE: 431016

Parameter	Units	3067341001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	26.9	36.6	58.7	87	80-120	

SAMPLE DUPLICATE: 431015

Parameter	Units	3067341001 Result	Dup Result	RPD	Max RPD	Qualifiers
Lead	mg/kg	26.9	3.6	152	20 D6	

QUALITY CONTROL DATA

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

QC Batch: MSV/12486 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035 Low
Associated Lab Samples: 3067122001, 3067122002, 3067122003, 3067122004, 3067122005

METHOD BLANK: 429278 Matrix: Solid
Associated Lab Samples: 3067122001, 3067122002, 3067122003, 3067122004, 3067122005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	mg/kg	0.0026U	0.0050	04/12/12 13:19	
1,1,2,2-Tetrachloroethane	mg/kg	0.00089U	0.0050	04/12/12 13:19	
1,1,2-Trichloroethane	mg/kg	0.00092U	0.0050	04/12/12 13:19	
1,1-Dichloroethane	mg/kg	0.00079U	0.0050	04/12/12 13:19	
1,1-Dichloroethene	mg/kg	0.00081U	0.0050	04/12/12 13:19	
1,2,4-Trimethylbenzene	mg/kg	0.0012U	0.0050	04/12/12 13:19	
1,2-Dibromoethane (EDB)	mg/kg	0.0026U	0.0050	04/12/12 13:19	
1,2-Dichlorobenzene	mg/kg	0.0011U	0.0050	04/12/12 13:19	
1,2-Dichloroethane	mg/kg	0.00091U	0.0050	04/12/12 13:19	
1,2-Dichloropropane	mg/kg	0.0016U	0.0050	04/12/12 13:19	
1,3,5-Trimethylbenzene	mg/kg	0.0014U	0.0050	04/12/12 13:19	
1,3-Dichlorobenzene	mg/kg	0.0013U	0.0050	04/12/12 13:19	
1,4-Dichlorobenzene	mg/kg	0.0012U	0.0050	04/12/12 13:19	
2-Butanone (MEK)	mg/kg	0.0013U	0.010	04/12/12 13:19	
2-Hexanone	mg/kg	0.0012U	0.010	04/12/12 13:19	
4-Methyl-2-pentanone (MIBK)	mg/kg	0.0010U	0.010	04/12/12 13:19	
Acetone	mg/kg	0.0056J	0.010	04/12/12 13:19	
Benzene	mg/kg	0.00078U	0.0050	04/12/12 13:19	
Bromodichloromethane	mg/kg	0.0018U	0.0050	04/12/12 13:19	
Bromoform	mg/kg	0.0025U	0.0050	04/12/12 13:19	
Bromomethane	mg/kg	0.0029U	0.0050	04/12/12 13:19	
Carbon disulfide	mg/kg	0.00077U	0.0050	04/12/12 13:19	
Carbon tetrachloride	mg/kg	0.00089U	0.0050	04/12/12 13:19	
Chlorobenzene	mg/kg	0.00099U	0.0050	04/12/12 13:19	
Chloroethane	mg/kg	0.0016U	0.0050	04/12/12 13:19	
Chloroform	mg/kg	0.00071U	0.0050	04/12/12 13:19	
Chloromethane	mg/kg	0.0010U	0.0050	04/12/12 13:19	
cis-1,2-Dichloroethene	mg/kg	0.0025U	0.0050	04/12/12 13:19	
cis-1,3-Dichloropropene	mg/kg	0.0016U	0.0050	04/12/12 13:19	
Dibromochloromethane	mg/kg	0.0015U	0.0050	04/12/12 13:19	
Ethylbenzene	mg/kg	0.0026U	0.0050	04/12/12 13:19	
Isopropylbenzene (Cumene)	mg/kg	0.0011U	0.0050	04/12/12 13:19	
m&p-Xylene	mg/kg	0.0019U	0.010	04/12/12 13:19	
Methyl-tert-butyl ether	mg/kg	0.00071U	0.0050	04/12/12 13:19	
Methylene Chloride	mg/kg	0.0033J	0.0050	04/12/12 13:19	
Naphthalene	mg/kg	0.0025U	0.0050	04/12/12 13:19	
o-Xylene	mg/kg	0.0011U	0.0050	04/12/12 13:19	
Styrene	mg/kg	0.0011U	0.0050	04/12/12 13:19	
Tetrachloroethene	mg/kg	0.00073U	0.0050	04/12/12 13:19	
Toluene	mg/kg	0.00064U	0.0050	04/12/12 13:19	
TOTAL BTEX	mg/kg	0.0070U	0.030	04/12/12 13:19	
trans-1,2-Dichloroethene	mg/kg	0.00082U	0.0050	04/12/12 13:19	
trans-1,3-Dichloropropene	mg/kg	0.0016U	0.0050	04/12/12 13:19	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 31 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

METHOD BLANK: 429278

Matrix: Solid

Associated Lab Samples: 3067122001, 3067122002, 3067122003, 3067122004, 3067122005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	mg/kg	0.00076U	0.0050	04/12/12 13:19	
Vinyl chloride	mg/kg	0.00081U	0.0050	04/12/12 13:19	
Xylene (Total)	mg/kg	0.0031U	0.015	04/12/12 13:19	
1,2-Dichloroethane-d4 (S)	%	100	70-130	04/12/12 13:19	
4-Bromofluorobenzene (S)	%	100	70-130	04/12/12 13:19	
Toluene-d8 (S)	%	92	70-130	04/12/12 13:19	

LABORATORY CONTROL SAMPLE: 429279

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	.02	0.018	92	55-141	
1,1,2,2-Tetrachloroethane	mg/kg	.02	0.015	75	58-124	
1,1,2-Trichloroethane	mg/kg	.02	0.017	84	70-118	
1,1-Dichloroethane	mg/kg	.02	0.016	78	64-127	
1,1-Dichloroethene	mg/kg	.02	0.018	90	50-133	
1,2,4-Trimethylbenzene	mg/kg	.02	0.016	78	67-130	
1,2-Dibromoethane (EDB)	mg/kg	.02	0.016	81	67-117	
1,2-Dichlorobenzene	mg/kg	.02	0.016	80	67-122	
1,2-Dichloroethane	mg/kg	.02	0.014	72	54-132	
1,2-Dichloropropane	mg/kg	.02	0.014	72	68-112	
1,3,5-Trimethylbenzene	mg/kg	.02	0.016	80	65-132	
1,3-Dichlorobenzene	mg/kg	.02	0.016	81	65-127	
1,4-Dichlorobenzene	mg/kg	.02	0.016	79	66-127	
2-Butanone (MEK)	mg/kg	.02	0.020	100	54-135	
2-Hexanone	mg/kg	.02	0.017	83	58-148	
4-Methyl-2-pentanone (MIBK)	mg/kg	.02	0.015	74	55-142	
Acetone	mg/kg	.02	0.030	151	39-200	
Benzene	mg/kg	.02	0.017	83	65-130	
Bromodichloromethane	mg/kg	.02	0.015	74	57-125	
Bromoform	mg/kg	.02	0.016	81	53-121	
Bromomethane	mg/kg	.02	0.015	76	30-167	
Carbon disulfide	mg/kg	.02	0.018	91	49-150	
Carbon tetrachloride	mg/kg	.02	0.018	92	47-146	
Chlorobenzene	mg/kg	.02	0.017	84	67-124	
Chloroethane	mg/kg	.02	0.020	101	34-170	
Chloroform	mg/kg	.02	0.016	80	63-128	
Chloromethane	mg/kg	.02	0.015	75	39-159	
cis-1,2-Dichloroethene	mg/kg	.02	0.015	75	64-126	
cis-1,3-Dichloropropene	mg/kg	.02	0.015	76	66-124	
Dibromochloromethane	mg/kg	.02	0.016	80	56-122	
Ethylbenzene	mg/kg	.02	0.018	88	65-131	
Isopropylbenzene (Cumene)	mg/kg	.02	0.018	90	64-137	
m&p-Xylene	mg/kg	.04	0.034	86	63-136	
Methyl-tert-butyl ether	mg/kg	.02	0.017	84	71-130	
Methylene Chloride	mg/kg	.02	0.020	98	45-136	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 32 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

LABORATORY CONTROL SAMPLE: 429279

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	mg/kg	.02	0.016	79	70-123	
o-Xylene	mg/kg	.02	0.018	88	68-129	
Styrene	mg/kg	.02	0.017	85	64-122	
Tetrachloroethene	mg/kg	.02	0.019	95	61-138	
Toluene	mg/kg	.02	0.017	85	63-132	
TOTAL BTEX	mg/kg		0.10			
trans-1,2-Dichloroethene	mg/kg	.02	0.016	79	60-130	
trans-1,3-Dichloropropene	mg/kg	.02	0.014	72	58-116	
Trichloroethene	mg/kg	.02	0.018	92	65-131	
Vinyl chloride	mg/kg	.02	0.016	82	49-149	
Xylene (Total)	mg/kg	.06	0.052	87	65-134	
1,2-Dichloroethane-d4 (S)	%			92	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Toluene-d8 (S)	%			96	70-130	

QUALITY CONTROL DATA

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

QC Batch: MSV/12497 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035 Low
Associated Lab Samples: 3067341001, 3067341002, 3067341003, 3067341004, 3067341005, 3067341006

METHOD BLANK: 429948 Matrix: Solid

Associated Lab Samples: 3067341001, 3067341002, 3067341003, 3067341004, 3067341005, 3067341006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	mg/kg	0.0026U	0.0050	04/13/12 12:04	
1,1,2,2-Tetrachloroethane	mg/kg	0.00089U	0.0050	04/13/12 12:04	
1,1,2-Trichloroethane	mg/kg	0.00092U	0.0050	04/13/12 12:04	
1,1-Dichloroethane	mg/kg	0.00079U	0.0050	04/13/12 12:04	
1,1-Dichloroethene	mg/kg	0.00081U	0.0050	04/13/12 12:04	
1,2-Dichlorobenzene	mg/kg	0.0011U	0.0050	04/13/12 12:04	
1,2-Dichloroethane	mg/kg	0.00091U	0.0050	04/13/12 12:04	
1,2-Dichloropropane	mg/kg	0.0016U	0.0050	04/13/12 12:04	
1,3-Dichlorobenzene	mg/kg	0.0013U	0.0050	04/13/12 12:04	
1,4-Dichlorobenzene	mg/kg	0.0012U	0.0050	04/13/12 12:04	
2-Butanone (MEK)	mg/kg	0.0013U	0.010	04/13/12 12:04	
2-Hexanone	mg/kg	0.0012U	0.010	04/13/12 12:04	
4-Methyl-2-pentanone (MIBK)	mg/kg	0.0010U	0.010	04/13/12 12:04	
Acetone	mg/kg	0.0089J	0.010	04/13/12 12:04	
Benzene	mg/kg	0.00078U	0.0050	04/13/12 12:04	
Bromodichloromethane	mg/kg	0.0018U	0.0050	04/13/12 12:04	
Bromoform	mg/kg	0.0025U	0.0050	04/13/12 12:04	
Bromomethane	mg/kg	0.0029U	0.0050	04/13/12 12:04	
Carbon disulfide	mg/kg	0.00077U	0.0050	04/13/12 12:04	
Carbon tetrachloride	mg/kg	0.00089U	0.0050	04/13/12 12:04	
Chlorobenzene	mg/kg	0.00099U	0.0050	04/13/12 12:04	
Chloroethane	mg/kg	0.0016U	0.0050	04/13/12 12:04	
Chloroform	mg/kg	0.00071U	0.0050	04/13/12 12:04	
Chloromethane	mg/kg	0.0010U	0.0050	04/13/12 12:04	
cis-1,2-Dichloroethene	mg/kg	0.0025U	0.0050	04/13/12 12:04	
cis-1,3-Dichloropropene	mg/kg	0.0016U	0.0050	04/13/12 12:04	
Dibromochloromethane	mg/kg	0.0015U	0.0050	04/13/12 12:04	
Ethylbenzene	mg/kg	0.0026U	0.0050	04/13/12 12:04	
m&p-Xylene	mg/kg	0.0019U	0.010	04/13/12 12:04	
Methyl-tert-butyl ether	mg/kg	0.00071U	0.0050	04/13/12 12:04	
Methylene Chloride	mg/kg	0.0014J	0.0050	04/13/12 12:04	
o-Xylene	mg/kg	0.0011U	0.0050	04/13/12 12:04	
Styrene	mg/kg	0.0011U	0.0050	04/13/12 12:04	
Tetrachloroethene	mg/kg	0.00073U	0.0050	04/13/12 12:04	
Toluene	mg/kg	0.00064U	0.0050	04/13/12 12:04	
TOTAL BTEX	mg/kg	0.0070U	0.030	04/13/12 12:04	
trans-1,2-Dichloroethene	mg/kg	0.00082U	0.0050	04/13/12 12:04	
trans-1,3-Dichloropropene	mg/kg	0.0016U	0.0050	04/13/12 12:04	
Trichloroethene	mg/kg	0.00076U	0.0050	04/13/12 12:04	
Vinyl chloride	mg/kg	0.00081U	0.0050	04/13/12 12:04	
Xylene (Total)	mg/kg	0.0031U	0.015	04/13/12 12:04	
1,2-Dichloroethane-d4 (S)	%	92	70-130	04/13/12 12:04	
4-Bromofluorobenzene (S)	%	97	70-130	04/13/12 12:04	

Date: 04/24/2012 01:18 PM

REPORT OF LABORATORY ANALYSIS

Page 34 of 39

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

METHOD BLANK: 429948

Matrix: Solid

Associated Lab Samples: 3067341001, 3067341002, 3067341003, 3067341004, 3067341005, 3067341006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene-d8 (S)	%	94	70-130	04/13/12 12:04	

LABORATORY CONTROL SAMPLE: 429949

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	.02	0.019	95	55-141	
1,1,2,2-Tetrachloroethane	mg/kg	.02	0.016	78	58-124	
1,1,2-Trichloroethane	mg/kg	.02	0.017	87	70-118	
1,1-Dichloroethane	mg/kg	.02	0.016	78	64-127	
1,1-Dichloroethene	mg/kg	.02	0.018	89	50-133	
1,2-Dichlorobenzene	mg/kg	.02	0.017	85	67-122	
1,2-Dichloroethane	mg/kg	.02	0.014	72	54-132	
1,2-Dichloropropane	mg/kg	.02	0.015	76	68-112	
1,3-Dichlorobenzene	mg/kg	.02	0.017	85	65-127	
1,4-Dichlorobenzene	mg/kg	.02	0.017	84	66-127	
2-Butanone (MEK)	mg/kg	.02	0.018	89	54-135	
2-Hexanone	mg/kg	.02	0.017	85	58-148	
4-Methyl-2-pentanone (MIBK)	mg/kg	.02	0.015	74	55-142	
Acetone	mg/kg	.02	0.033	163	39-200	
Benzene	mg/kg	.02	0.017	85	65-130	
Bromodichloromethane	mg/kg	.02	0.015	75	57-125	
Bromoform	mg/kg	.02	0.016	79	53-121	
Bromomethane	mg/kg	.02	0.0081	40	30-167	
Carbon disulfide	mg/kg	.02	0.018	89	49-150	
Carbon tetrachloride	mg/kg	.02	0.019	95	47-146	
Chlorobenzene	mg/kg	.02	0.018	88	67-124	
Chloroethane	mg/kg	.02	0.055	276	34-170 L0	
Chloroform	mg/kg	.02	0.016	82	63-128	
Chloromethane	mg/kg	.02	0.016	78	39-159	
cis-1,2-Dichloroethene	mg/kg	.02	0.015	74	64-126	
cis-1,3-Dichloropropene	mg/kg	.02	0.016	79	66-124	
Dibromochloromethane	mg/kg	.02	0.016	81	56-122	
Ethylbenzene	mg/kg	.02	0.018	92	65-131	
m&p-Xylene	mg/kg	.04	0.036	91	63-136	
Methyl-tert-butyl ether	mg/kg	.02	0.016	79	71-130	
Methylene Chloride	mg/kg	.02	0.015	75	45-136	
o-Xylene	mg/kg	.02	0.018	92	68-129	
Styrene	mg/kg	.02	0.018	89	64-122	
Tetrachloroethene	mg/kg	.02	0.020	100	61-138	
Toluene	mg/kg	.02	0.018	88	63-132	
TOTAL BTEX	mg/kg		0.11			
trans-1,2-Dichloroethene	mg/kg	.02	0.016	80	60-130	
trans-1,3-Dichloropropene	mg/kg	.02	0.015	73	58-116	
Trichloroethene	mg/kg	.02	0.019	96	65-131	
Vinyl chloride	mg/kg	.02	0.021	105	49-149	

QUALITY CONTROL DATA

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

LABORATORY CONTROL SAMPLE: 429949

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Xylene (Total)	mg/kg	.06	0.055	91	65-134	
1,2-Dichloroethane-d4 (S)	%			94	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			98	70-130	

QUALITY CONTROL DATA

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

QC Batch:	PMST/3120	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	3067122001, 3067122002, 3067122003, 3067122004, 3067122005, 3067341001, 3067341002, 3067341003, 3067341004, 3067341005, 3067341006		

SAMPLE DUPLICATE: 432242

Parameter	Units	3067248001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	0.84	1.1	22	20	

SAMPLE DUPLICATE: 432243

Parameter	Units	3067418001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	16.6	14.0	17	20	

QUALIFIERS

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/12486

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/12497

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 911TH AIRLIFT WING T-RAMP

Pace Project No.: 3067122

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3067122001	TRAMP-D12-S-4-6	EPA 3050	MPRP/8129	EPA 6010B	ICP/7570
3067122002	TRAMP-H8-S-15-17	EPA 3050	MPRP/8129	EPA 6010B	ICP/7570
3067122003	TRAMP-F5-S-6-8	EPA 3050	MPRP/8129	EPA 6010B	ICP/7570
3067122004	TRAMP-E9-S-2-4	EPA 3050	MPRP/8129	EPA 6010B	ICP/7570
3067122005	TRAMP-H6-S-14-16	EPA 3050	MPRP/8129	EPA 6010B	ICP/7570
3067341001	TRAMP-L2-S-6-8	EPA 3050	MPRP/8146	EPA 6010B	ICP/7587
3067341002	DUP-2	EPA 3050	MPRP/8146	EPA 6010B	ICP/7587
3067341003	TRAMP-A14-S-2-4	EPA 3050	MPRP/8146	EPA 6010B	ICP/7587
3067341004	TRAMP-A10-S-2-4	EPA 3050	MPRP/8146	EPA 6010B	ICP/7587
3067341005	TRAMP-B13-S-2-4	EPA 3050	MPRP/8146	EPA 6010B	ICP/7587
3067341006	TRAMP-A11-S-2-4	EPA 3050	MPRP/8146	EPA 6010B	ICP/7587
3067122001	TRAMP-D12-S-4-6	EPA 8260	MSV/12486		
3067122002	TRAMP-H8-S-15-17	EPA 8260	MSV/12486		
3067122003	TRAMP-F5-S-6-8	EPA 8260	MSV/12486		
3067122004	TRAMP-E9-S-2-4	EPA 8260	MSV/12486		
3067122005	TRAMP-H6-S-14-16	EPA 8260	MSV/12486		
3067341001	TRAMP-L2-S-6-8	EPA 8260	MSV/12497		
3067341002	DUP-2	EPA 8260	MSV/12497		
3067341003	TRAMP-A14-S-2-4	EPA 8260	MSV/12497		
3067341004	TRAMP-A10-S-2-4	EPA 8260	MSV/12497		
3067341005	TRAMP-B13-S-2-4	EPA 8260	MSV/12497		
3067341006	TRAMP-A11-S-2-4	EPA 8260	MSV/12497		
3067122001	TRAMP-D12-S-4-6	ASTM D2974-87	PMST/3120		
3067122002	TRAMP-H8-S-15-17	ASTM D2974-87	PMST/3120		
3067122003	TRAMP-F5-S-6-8	ASTM D2974-87	PMST/3120		
3067122004	TRAMP-E9-S-2-4	ASTM D2974-87	PMST/3120		
3067122005	TRAMP-H6-S-14-16	ASTM D2974-87	PMST/3120		
3067341001	TRAMP-L2-S-6-8	ASTM D2974-87	PMST/3120		
3067341002	DUP-2	ASTM D2974-87	PMST/3120		
3067341003	TRAMP-A14-S-2-4	ASTM D2974-87	PMST/3120		
3067341004	TRAMP-A10-S-2-4	ASTM D2974-87	PMST/3120		
3067341005	TRAMP-B13-S-2-4	ASTM D2974-87	PMST/3120		
3067341006	TRAMP-A11-S-2-4	ASTM D2974-87	PMST/3120		

April 30, 2012

Jason McCabe
Rhea Engineers & Consultants, Inc.
4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044

RE: Project: 911th Airlift Wing T-Ramp
Pace Project No.: 3067598

Dear Jason McCabe:

Enclosed are the analytical results for sample(s) received by the laboratory on April 17, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Timothy Reed

timothy.reed@pacelabs.com
Project Manager

Enclosures

cc: Erica DeLattre, Rhea Engineers & Consultants, Inc.
Dan DePra, CDM Smith



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

CERTIFICATIONS

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601

ACCLASS DOD-ELAP Accreditation #: ADE-1544

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California/TNI Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

Delaware Certification

Florida/TNI Certification #: E87683

Guam/PADEP Certification

Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification

Indiana/PADEP Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana/TNI Certification #: LA080002

Louisiana/TNI Certification #: 4086

Maine Certification #: PA0091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188

Utah/TNI Certification #: ANTE

Virgin Island/PADEP Certification

Virginia Certification #: 00112

Virginia VELAP (Cert # 460198)

Washington Certification #: C868

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

Page 2 of 21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE SUMMARY

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3067598001	TRAMP-K6-S-4-6	Solid	04/12/12 11:37	04/17/12 12:35
3067598002	TRAMP-F11-S-0-2	Solid	04/13/12 09:43	04/17/12 12:35
3067598003	TRAMP-H0-S-6-8	Solid	04/16/12 11:12	04/17/12 12:35
3067598004	DUP-3	Solid		04/17/12 12:35

REPORT OF LABORATORY ANALYSIS

Page 3 of 21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE ANALYTE COUNT

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3067598001	TRAMP-K6-S-4-6	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067598002	TRAMP-F11-S-0-2	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067598003	TRAMP-H0-S-6-8	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067598004	DUP-3	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1

REPORT OF LABORATORY ANALYSIS

Page 4 of 21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Method: EPA 6010B

Description: 6010 MET ICP

Client: CDM Smith

Date: April 30, 2012

General Information:

4 samples were analyzed for EPA 6010B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: MPRP/8168

D6: The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 432771)
- Lead

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 5 of 21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Method: EPA 8260

Description: 8260 MSV 5030 Low Level

Client: CDM Smith

Date: April 30, 2012

General Information:

4 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/12541

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 6 of 21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Sample: TRAMP-K6-S-4-6 **Lab ID: 3067598001** Collected: 04/12/12 11:37 Received: 04/17/12 12:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	17.8	mg/kg	0.38	0.32	1	04/23/12 10:55	04/24/12 11:24	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	0.0078J	mg/kg	0.013	0.0024	1		04/19/12 16:47	67-64-1	
Benzene	0.0013J	mg/kg	0.0063	0.00098	1		04/19/12 16:47	71-43-2	
Bromodichloromethane	0.0023U	mg/kg	0.0063	0.0023	1		04/19/12 16:47	75-27-4	
Bromoform	0.0032U	mg/kg	0.0063	0.0032	1		04/19/12 16:47	75-25-2	
Bromomethane	0.0037U	mg/kg	0.0063	0.0037	1		04/19/12 16:47	74-83-9	
TOTAL BTEX	0.0088U	mg/kg	0.038	0.0088	1		04/19/12 16:47		
2-Butanone (MEK)	0.0016U	mg/kg	0.013	0.0016	1		04/19/12 16:47	78-93-3	
Carbon disulfide	0.016	mg/kg	0.0063	0.00096	1		04/19/12 16:47	75-15-0	
Carbon tetrachloride	0.0011U	mg/kg	0.0063	0.0011	1		04/19/12 16:47	56-23-5	
Chlorobenzene	0.0012U	mg/kg	0.0063	0.0012	1		04/19/12 16:47	108-90-7	
Chloroethane	0.0020U	mg/kg	0.0063	0.0020	1		04/19/12 16:47	75-00-3	
Chloroform	0.00089U	mg/kg	0.0063	0.00089	1		04/19/12 16:47	67-66-3	
Chloromethane	0.0013U	mg/kg	0.0063	0.0013	1		04/19/12 16:47	74-87-3	
Dibromochloromethane	0.0019U	mg/kg	0.0063	0.0019	1		04/19/12 16:47	124-48-1	
1,2-Dibromoethane (EDB)	0.0033U	mg/kg	0.0063	0.0033	1		04/19/12 16:47	106-93-4	
1,2-Dichlorobenzene	0.0014U	mg/kg	0.0063	0.0014	1		04/19/12 16:47	95-50-1	
1,3-Dichlorobenzene	0.0016U	mg/kg	0.0063	0.0016	1		04/19/12 16:47	541-73-1	
1,4-Dichlorobenzene	0.0015U	mg/kg	0.0063	0.0015	1		04/19/12 16:47	106-46-7	
1,1-Dichloroethane	0.00099U	mg/kg	0.0063	0.00099	1		04/19/12 16:47	75-34-3	
1,2-Dichloroethane	0.0011U	mg/kg	0.0063	0.0011	1		04/19/12 16:47	107-06-2	
1,2-Dichloroethene (Total)	0.0041U	mg/kg	0.013	0.0041	1		04/19/12 16:47	540-59-0	
1,1-Dichloroethene	0.0010U	mg/kg	0.0063	0.0010	1		04/19/12 16:47	75-35-4	
cis-1,2-Dichloroethene	0.0031U	mg/kg	0.0063	0.0031	1		04/19/12 16:47	156-59-2	
trans-1,2-Dichloroethene	0.0010U	mg/kg	0.0063	0.0010	1		04/19/12 16:47	156-60-5	
1,2-Dichloropropane	0.0020U	mg/kg	0.0063	0.0020	1		04/19/12 16:47	78-87-5	
cis-1,3-Dichloropropene	0.0020U	mg/kg	0.0063	0.0020	1		04/19/12 16:47	10061-01-5	
trans-1,3-Dichloropropene	0.0020U	mg/kg	0.0063	0.0020	1		04/19/12 16:47	10061-02-6	
Ethylbenzene	0.0032U	mg/kg	0.0063	0.0032	1		04/19/12 16:47	100-41-4	
2-Hexanone	0.0015U	mg/kg	0.013	0.0015	1		04/19/12 16:47	591-78-6	
Isopropylbenzene (Cumene)	0.0013U	mg/kg	0.0063	0.0013	1		04/19/12 16:47	98-82-8	
Methylene Chloride	0.0017U	mg/kg	0.0063	0.0017	1		04/19/12 16:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.0013U	mg/kg	0.013	0.0013	1		04/19/12 16:47	108-10-1	
Methyl-tert-butyl ether	0.00089U	mg/kg	0.0063	0.00089	1		04/19/12 16:47	1634-04-4	
Naphthalene	0.0032U	mg/kg	0.0063	0.0032	1		04/19/12 16:47	91-20-3	
Styrene	0.0014U	mg/kg	0.0063	0.0014	1		04/19/12 16:47	100-42-5	
1,1,2,2-Tetrachloroethane	0.0011U	mg/kg	0.0063	0.0011	1		04/19/12 16:47	79-34-5	
Tetrachloroethene	0.00091U	mg/kg	0.0063	0.00091	1		04/19/12 16:47	127-18-4	
Toluene	0.00081U	mg/kg	0.0063	0.00081	1		04/19/12 16:47	108-88-3	
1,1,1-Trichloroethane	0.0033U	mg/kg	0.0063	0.0033	1		04/19/12 16:47	71-55-6	
1,1,2-Trichloroethane	0.0012U	mg/kg	0.0063	0.0012	1		04/19/12 16:47	79-00-5	
Trichloroethene	0.00095U	mg/kg	0.0063	0.00095	1		04/19/12 16:47	79-01-6	
1,2,4-Trimethylbenzene	0.0015U	mg/kg	0.0063	0.0015	1		04/19/12 16:47	95-63-6	

Date: 04/30/2012 04:35 PM

REPORT OF LABORATORY ANALYSIS

Page 7 of 21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Sample: TRAMP-K6-S-4-6 **Lab ID: 3067598001** Collected: 04/12/12 11:37 Received: 04/17/12 12:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0017U	mg/kg	0.0063	0.0017	1		04/19/12 16:47	108-67-8	
Vinyl chloride	0.0010U	mg/kg	0.0063	0.0010	1		04/19/12 16:47	75-01-4	
Xylene (Total)	0.0038U	mg/kg	0.019	0.0038	1		04/19/12 16:47	1330-20-7	
m&p-Xylene	0.0024U	mg/kg	0.013	0.0024	1		04/19/12 16:47	179601-23-1	
o-Xylene	0.0014U	mg/kg	0.0063	0.0014	1		04/19/12 16:47	95-47-6	
Surrogates									
Toluene-d8 (S)	89	%	70-130		1		04/19/12 16:47	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130		1		04/19/12 16:47	460-00-4	
1,2-Dichloroethane-d4 (S)	76	%	70-130		1		04/19/12 16:47	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	20.4	%	0.10	0.10	1		04/25/12 15:58		

ANALYTICAL RESULTS

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Sample: TRAMP-F11-S-0-2 **Lab ID: 3067598002** Collected: 04/13/12 09:43 Received: 04/17/12 12:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010B Preparation Method: EPA 3050							
Lead	12.2	mg/kg	0.39	0.33	1	04/23/12 10:55	04/24/12 11:27	7439-92-1	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260							
Acetone	0.0044J	mg/kg	0.0087	0.0017	1		04/19/12 17:10	67-64-1	
Benzene	0.0031J	mg/kg	0.0044	0.00068	1		04/19/12 17:10	71-43-2	
Bromodichloromethane	0.0016U	mg/kg	0.0044	0.0016	1		04/19/12 17:10	75-27-4	
Bromoform	0.0022U	mg/kg	0.0044	0.0022	1		04/19/12 17:10	75-25-2	
Bromomethane	0.0026U	mg/kg	0.0044	0.0026	1		04/19/12 17:10	74-83-9	
TOTAL BTEX	0.0061U	mg/kg	0.026	0.0061	1		04/19/12 17:10		
2-Butanone (MEK)	0.0011U	mg/kg	0.0087	0.0011	1		04/19/12 17:10	78-93-3	
Carbon disulfide	0.0057	mg/kg	0.0044	0.00067	1		04/19/12 17:10	75-15-0	
Carbon tetrachloride	0.00078U	mg/kg	0.0044	0.00078	1		04/19/12 17:10	56-23-5	
Chlorobenzene	0.00086U	mg/kg	0.0044	0.00086	1		04/19/12 17:10	108-90-7	
Chloroethane	0.0014U	mg/kg	0.0044	0.0014	1		04/19/12 17:10	75-00-3	
Chloroform	0.00062U	mg/kg	0.0044	0.00062	1		04/19/12 17:10	67-66-3	
Chloromethane	0.00091U	mg/kg	0.0044	0.00091	1		04/19/12 17:10	74-87-3	
Dibromochloromethane	0.0013U	mg/kg	0.0044	0.0013	1		04/19/12 17:10	124-48-1	
1,2-Dibromoethane (EDB)	0.0023U	mg/kg	0.0044	0.0023	1		04/19/12 17:10	106-93-4	
1,2-Dichlorobenzene	0.00095U	mg/kg	0.0044	0.00095	1		04/19/12 17:10	95-50-1	
1,3-Dichlorobenzene	0.0011U	mg/kg	0.0044	0.0011	1		04/19/12 17:10	541-73-1	
1,4-Dichlorobenzene	0.0011U	mg/kg	0.0044	0.0011	1		04/19/12 17:10	106-46-7	
1,1-Dichloroethane	0.00069U	mg/kg	0.0044	0.00069	1		04/19/12 17:10	75-34-3	
1,2-Dichloroethane	0.00079U	mg/kg	0.0044	0.00079	1		04/19/12 17:10	107-06-2	
1,2-Dichloroethene (Total)	0.0029U	mg/kg	0.0087	0.0029	1		04/19/12 17:10	540-59-0	
1,1-Dichloroethene	0.00071U	mg/kg	0.0044	0.00071	1		04/19/12 17:10	75-35-4	
cis-1,2-Dichloroethene	0.0021U	mg/kg	0.0044	0.0021	1		04/19/12 17:10	156-59-2	
trans-1,2-Dichloroethene	0.00071U	mg/kg	0.0044	0.00071	1		04/19/12 17:10	156-60-5	
1,2-Dichloropropane	0.0014U	mg/kg	0.0044	0.0014	1		04/19/12 17:10	78-87-5	
cis-1,3-Dichloropropene	0.0014U	mg/kg	0.0044	0.0014	1		04/19/12 17:10	10061-01-5	
trans-1,3-Dichloropropene	0.0014U	mg/kg	0.0044	0.0014	1		04/19/12 17:10	10061-02-6	
Ethylbenzene	0.0022U	mg/kg	0.0044	0.0022	1		04/19/12 17:10	100-41-4	
2-Hexanone	0.0010U	mg/kg	0.0087	0.0010	1		04/19/12 17:10	591-78-6	
Isopropylbenzene (Cumene)	0.00092U	mg/kg	0.0044	0.00092	1		04/19/12 17:10	98-82-8	
Methylene Chloride	0.0012U	mg/kg	0.0044	0.0012	1		04/19/12 17:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.00090U	mg/kg	0.0087	0.00090	1		04/19/12 17:10	108-10-1	
Methyl-tert-butyl ether	0.00062U	mg/kg	0.0044	0.00062	1		04/19/12 17:10	1634-04-4	
Naphthalene	0.0022U	mg/kg	0.0044	0.0022	1		04/19/12 17:10	91-20-3	
Styrene	0.00097U	mg/kg	0.0044	0.00097	1		04/19/12 17:10	100-42-5	
1,1,2,2-Tetrachloroethane	0.00077U	mg/kg	0.0044	0.00077	1		04/19/12 17:10	79-34-5	
Tetrachloroethene	0.00063U	mg/kg	0.0044	0.00063	1		04/19/12 17:10	127-18-4	
Toluene	0.0019J	mg/kg	0.0044	0.00056	1		04/19/12 17:10	108-88-3	
1,1,1-Trichloroethane	0.0023U	mg/kg	0.0044	0.0023	1		04/19/12 17:10	71-55-6	
1,1,2-Trichloroethane	0.00080U	mg/kg	0.0044	0.00080	1		04/19/12 17:10	79-00-5	
Trichloroethene	0.00066U	mg/kg	0.0044	0.00066	1		04/19/12 17:10	79-01-6	
1,2,4-Trimethylbenzene	0.0010U	mg/kg	0.0044	0.0010	1		04/19/12 17:10	95-63-6	

Date: 04/30/2012 04:35 PM

REPORT OF LABORATORY ANALYSIS

Page 9 of 21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Sample: TRAMP-F11-S-0-2 **Lab ID: 3067598002** Collected: 04/13/12 09:43 Received: 04/17/12 12:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0012U	mg/kg	0.0044	0.0012	1		04/19/12 17:10	108-67-8	
Vinyl chloride	0.00070U	mg/kg	0.0044	0.00070	1		04/19/12 17:10	75-01-4	
Xylene (Total)	0.0027U	mg/kg	0.013	0.0027	1		04/19/12 17:10	1330-20-7	
m&p-Xylene	0.0017U	mg/kg	0.0087	0.0017	1		04/19/12 17:10	179601-23-1	
o-Xylene	0.00098U	mg/kg	0.0044	0.00098	1		04/19/12 17:10	95-47-6	
Surrogates									
Toluene-d8 (S)	85 %		70-130		1		04/19/12 17:10	2037-26-5	
4-Bromofluorobenzene (S)	97 %		70-130		1		04/19/12 17:10	460-00-4	
1,2-Dichloroethane-d4 (S)	76 %		70-130		1		04/19/12 17:10	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	6.4	%	0.10	0.10	1		04/25/12 15:58		

ANALYTICAL RESULTS

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Sample: TRAMP-H0-S-6-8 **Lab ID: 3067598003** Collected: 04/16/12 11:12 Received: 04/17/12 12:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	22.4	mg/kg	0.32	0.27	1	04/23/12 10:55	04/24/12 11:30	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.013	mg/kg	0.0097	0.0019	1		04/19/12 17:33	67-64-1	
Benzene	0.00076U	mg/kg	0.0049	0.00076	1		04/19/12 17:33	71-43-2	
Bromodichloromethane	0.0018U	mg/kg	0.0049	0.0018	1		04/19/12 17:33	75-27-4	
Bromoform	0.0025U	mg/kg	0.0049	0.0025	1		04/19/12 17:33	75-25-2	
Bromomethane	0.0029U	mg/kg	0.0049	0.0029	1		04/19/12 17:33	74-83-9	
TOTAL BTEX	0.0068U	mg/kg	0.029	0.0068	1		04/19/12 17:33		
2-Butanone (MEK)	0.0012U	mg/kg	0.0097	0.0012	1		04/19/12 17:33	78-93-3	
Carbon disulfide	0.00074U	mg/kg	0.0049	0.00074	1		04/19/12 17:33	75-15-0	
Carbon tetrachloride	0.00086U	mg/kg	0.0049	0.00086	1		04/19/12 17:33	56-23-5	
Chlorobenzene	0.00096U	mg/kg	0.0049	0.00096	1		04/19/12 17:33	108-90-7	
Chloroethane	0.0016U	mg/kg	0.0049	0.0016	1		04/19/12 17:33	75-00-3	
Chloroform	0.00069U	mg/kg	0.0049	0.00069	1		04/19/12 17:33	67-66-3	
Chloromethane	0.0010U	mg/kg	0.0049	0.0010	1		04/19/12 17:33	74-87-3	
Dibromochloromethane	0.0015U	mg/kg	0.0049	0.0015	1		04/19/12 17:33	124-48-1	
1,2-Dibromoethane (EDB)	0.0025U	mg/kg	0.0049	0.0025	1		04/19/12 17:33	106-93-4	
1,2-Dichlorobenzene	0.0011U	mg/kg	0.0049	0.0011	1		04/19/12 17:33	95-50-1	
1,3-Dichlorobenzene	0.0012U	mg/kg	0.0049	0.0012	1		04/19/12 17:33	541-73-1	
1,4-Dichlorobenzene	0.0012U	mg/kg	0.0049	0.0012	1		04/19/12 17:33	106-46-7	
1,1-Dichloroethane	0.00077U	mg/kg	0.0049	0.00077	1		04/19/12 17:33	75-34-3	
1,2-Dichloroethane	0.00088U	mg/kg	0.0049	0.00088	1		04/19/12 17:33	107-06-2	
1,2-Dichloroethene (Total)	0.0032U	mg/kg	0.0097	0.0032	1		04/19/12 17:33	540-59-0	
1,1-Dichloroethene	0.00079U	mg/kg	0.0049	0.00079	1		04/19/12 17:33	75-35-4	
cis-1,2-Dichloroethene	0.0024U	mg/kg	0.0049	0.0024	1		04/19/12 17:33	156-59-2	
trans-1,2-Dichloroethene	0.00079U	mg/kg	0.0049	0.00079	1		04/19/12 17:33	156-60-5	
1,2-Dichloropropane	0.0016U	mg/kg	0.0049	0.0016	1		04/19/12 17:33	78-87-5	
cis-1,3-Dichloropropene	0.0015U	mg/kg	0.0049	0.0015	1		04/19/12 17:33	10061-01-5	
trans-1,3-Dichloropropene	0.0016U	mg/kg	0.0049	0.0016	1		04/19/12 17:33	10061-02-6	
Ethylbenzene	0.0025U	mg/kg	0.0049	0.0025	1		04/19/12 17:33	100-41-4	
2-Hexanone	0.0011U	mg/kg	0.0097	0.0011	1		04/19/12 17:33	591-78-6	
Isopropylbenzene (Cumene)	0.0010U	mg/kg	0.0049	0.0010	1		04/19/12 17:33	98-82-8	
Methylene Chloride	0.0013U	mg/kg	0.0049	0.0013	1		04/19/12 17:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.0010U	mg/kg	0.0097	0.0010	1		04/19/12 17:33	108-10-1	
Methyl-tert-butyl ether	0.00069U	mg/kg	0.0049	0.00069	1		04/19/12 17:33	1634-04-4	
Naphthalene	0.0024U	mg/kg	0.0049	0.0024	1		04/19/12 17:33	91-20-3	
Styrene	0.0011U	mg/kg	0.0049	0.0011	1		04/19/12 17:33	100-42-5	
1,1,2,2-Tetrachloroethane	0.00086U	mg/kg	0.0049	0.00086	1		04/19/12 17:33	79-34-5	
Tetrachloroethene	0.00070U	mg/kg	0.0049	0.00070	1		04/19/12 17:33	127-18-4	
Toluene	0.0012J	mg/kg	0.0049	0.00062	1		04/19/12 17:33	108-88-3	
1,1,1-Trichloroethane	0.0025U	mg/kg	0.0049	0.0025	1		04/19/12 17:33	71-55-6	
1,1,2-Trichloroethane	0.00089U	mg/kg	0.0049	0.00089	1		04/19/12 17:33	79-00-5	
Trichloroethene	0.00073U	mg/kg	0.0049	0.00073	1		04/19/12 17:33	79-01-6	
1,2,4-Trimethylbenzene	0.0011U	mg/kg	0.0049	0.0011	1		04/19/12 17:33	95-63-6	

Date: 04/30/2012 04:35 PM

REPORT OF LABORATORY ANALYSIS

Page 11 of 21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Sample: TRAMP-H0-S-6-8 **Lab ID: 3067598003** Collected: 04/16/12 11:12 Received: 04/17/12 12:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0013U	mg/kg	0.0049	0.0013	1		04/19/12 17:33	108-67-8	
Vinyl chloride	0.00078U	mg/kg	0.0049	0.00078	1		04/19/12 17:33	75-01-4	
Xylene (Total)	0.0030U	mg/kg	0.015	0.0030	1		04/19/12 17:33	1330-20-7	
m&p-Xylene	0.0019U	mg/kg	0.0097	0.0019	1		04/19/12 17:33	179601-23-1	
o-Xylene	0.0011U	mg/kg	0.0049	0.0011	1		04/19/12 17:33	95-47-6	
Surrogates									
Toluene-d8 (S)	87	%	70-130		1		04/19/12 17:33	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		04/19/12 17:33	460-00-4	
1,2-Dichloroethane-d4 (S)	78	%	70-130		1		04/19/12 17:33	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	18.9	%	0.10	0.10	1		04/25/12 15:58		

ANALYTICAL RESULTS

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Sample: DUP-3 **Lab ID:** 3067598004 **Collected:** **Received:** 04/17/12 12:35 **Matrix:** Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	21.3	mg/kg	0.31	0.26	1	04/23/12 10:55	04/24/12 11:33	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.060	mg/kg	0.0099	0.0019	1		04/19/12 17:57	67-64-1	
Benzene	0.00077U	mg/kg	0.0049	0.00077	1		04/19/12 17:57	71-43-2	
Bromodichloromethane	0.0018U	mg/kg	0.0049	0.0018	1		04/19/12 17:57	75-27-4	
Bromoform	0.0025U	mg/kg	0.0049	0.0025	1		04/19/12 17:57	75-25-2	
Bromomethane	0.0029U	mg/kg	0.0049	0.0029	1		04/19/12 17:57	74-83-9	
TOTAL BTEX	0.0070U	mg/kg	0.030	0.0070	1		04/19/12 17:57		
2-Butanone (MEK)	0.012	mg/kg	0.0099	0.0012	1		04/19/12 17:57	78-93-3	
Carbon disulfide	0.0023J	mg/kg	0.0049	0.00076	1		04/19/12 17:57	75-15-0	
Carbon tetrachloride	0.00088U	mg/kg	0.0049	0.00088	1		04/19/12 17:57	56-23-5	
Chlorobenzene	0.00098U	mg/kg	0.0049	0.00098	1		04/19/12 17:57	108-90-7	
Chloroethane	0.0016U	mg/kg	0.0049	0.0016	1		04/19/12 17:57	75-00-3	
Chloroform	0.00070U	mg/kg	0.0049	0.00070	1		04/19/12 17:57	67-66-3	
Chloromethane	0.0010U	mg/kg	0.0049	0.0010	1		04/19/12 17:57	74-87-3	
Dibromochloromethane	0.0015U	mg/kg	0.0049	0.0015	1		04/19/12 17:57	124-48-1	
1,2-Dibromoethane (EDB)	0.0026U	mg/kg	0.0049	0.0026	1		04/19/12 17:57	106-93-4	
1,2-Dichlorobenzene	0.0011U	mg/kg	0.0049	0.0011	1		04/19/12 17:57	95-50-1	
1,3-Dichlorobenzene	0.0013U	mg/kg	0.0049	0.0013	1		04/19/12 17:57	541-73-1	
1,4-Dichlorobenzene	0.0012U	mg/kg	0.0049	0.0012	1		04/19/12 17:57	106-46-7	
1,1-Dichloroethane	0.00078U	mg/kg	0.0049	0.00078	1		04/19/12 17:57	75-34-3	
1,2-Dichloroethane	0.00090U	mg/kg	0.0049	0.00090	1		04/19/12 17:57	107-06-2	
1,2-Dichloroethene (Total)	0.0032U	mg/kg	0.0099	0.0032	1		04/19/12 17:57	540-59-0	
1,1-Dichloroethene	0.00080U	mg/kg	0.0049	0.00080	1		04/19/12 17:57	75-35-4	
cis-1,2-Dichloroethene	0.0024U	mg/kg	0.0049	0.0024	1		04/19/12 17:57	156-59-2	
trans-1,2-Dichloroethene	0.00081U	mg/kg	0.0049	0.00081	1		04/19/12 17:57	156-60-5	
1,2-Dichloropropane	0.0016U	mg/kg	0.0049	0.0016	1		04/19/12 17:57	78-87-5	
cis-1,3-Dichloropropene	0.0015U	mg/kg	0.0049	0.0015	1		04/19/12 17:57	10061-01-5	
trans-1,3-Dichloropropene	0.0016U	mg/kg	0.0049	0.0016	1		04/19/12 17:57	10061-02-6	
Ethylbenzene	0.0025U	mg/kg	0.0049	0.0025	1		04/19/12 17:57	100-41-4	
2-Hexanone	0.0012U	mg/kg	0.0099	0.0012	1		04/19/12 17:57	591-78-6	
Isopropylbenzene (Cumene)	0.0010U	mg/kg	0.0049	0.0010	1		04/19/12 17:57	98-82-8	
Methylene Chloride	0.0013U	mg/kg	0.0049	0.0013	1		04/19/12 17:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.0010U	mg/kg	0.0099	0.0010	1		04/19/12 17:57	108-10-1	
Methyl-tert-butyl ether	0.00070U	mg/kg	0.0049	0.00070	1		04/19/12 17:57	1634-04-4	
Naphthalene	0.0025U	mg/kg	0.0049	0.0025	1		04/19/12 17:57	91-20-3	
Styrene	0.0011U	mg/kg	0.0049	0.0011	1		04/19/12 17:57	100-42-5	
1,1,2,2-Tetrachloroethane	0.00087U	mg/kg	0.0049	0.00087	1		04/19/12 17:57	79-34-5	
Tetrachloroethene	0.00072U	mg/kg	0.0049	0.00072	1		04/19/12 17:57	127-18-4	
Toluene	0.00082J	mg/kg	0.0049	0.00063	1		04/19/12 17:57	108-88-3	
1,1,1-Trichloroethane	0.0026U	mg/kg	0.0049	0.0026	1		04/19/12 17:57	71-55-6	
1,1,2-Trichloroethane	0.00091U	mg/kg	0.0049	0.00091	1		04/19/12 17:57	79-00-5	
Trichloroethene	0.00075U	mg/kg	0.0049	0.00075	1		04/19/12 17:57	79-01-6	
1,2,4-Trimethylbenzene	0.0011U	mg/kg	0.0049	0.0011	1		04/19/12 17:57	95-63-6	

Date: 04/30/2012 04:35 PM

REPORT OF LABORATORY ANALYSIS

Page 13 of 21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Sample: DUP-3 **Lab ID:** 3067598004 **Collected:** **Received:** 04/17/12 12:35 **Matrix:** Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0013U	mg/kg	0.0049	0.0013	1		04/19/12 17:57	108-67-8	
Vinyl chloride	0.00080U	mg/kg	0.0049	0.00080	1		04/19/12 17:57	75-01-4	
Xylene (Total)	0.0030U	mg/kg	0.015	0.0030	1		04/19/12 17:57	1330-20-7	
m&p-Xylene	0.0019U	mg/kg	0.0099	0.0019	1		04/19/12 17:57	179601-23-1	
o-Xylene	0.0011U	mg/kg	0.0049	0.0011	1		04/19/12 17:57	95-47-6	
Surrogates									
Toluene-d8 (S)	86	%	70-130		1		04/19/12 17:57	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130		1		04/19/12 17:57	460-00-4	
1,2-Dichloroethane-d4 (S)	78	%	70-130		1		04/19/12 17:57	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	16.2	%	0.10	0.10	1		04/25/12 15:58		

QUALITY CONTROL DATA

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

QC Batch: MPRP/8168 Analysis Method: EPA 6010B

QC Batch Method: EPA 3050 Analysis Description: 6010 MET

Associated Lab Samples: 3067598001, 3067598002, 3067598003, 3067598004

METHOD BLANK: 432769 Matrix: Solid

Associated Lab Samples: 3067598001, 3067598002, 3067598003, 3067598004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	0.44J	0.50	04/24/12 11:02	

LABORATORY CONTROL SAMPLE: 432770

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	47.7	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 432772 432773

Parameter	Units	3067855007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	mg/kg	22.5	43.2	38	62.1	58.5	92	95	80-120	6	20	

SAMPLE DUPLICATE: 432771

Parameter	Units	3067855007 Result	Dup Result	RPD	Max RPD	Qualifiers
Lead	mg/kg	22.5	15.3	38	20	D6

QUALITY CONTROL DATA

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

QC Batch: MSV/12541 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035 Low
Associated Lab Samples: 3067598001, 3067598002, 3067598003, 3067598004

METHOD BLANK: 431907 Matrix: Solid

Associated Lab Samples: 3067598001, 3067598002, 3067598003, 3067598004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	mg/kg	0.0026U	0.0050	04/19/12 11:46	
1,1,2,2-Tetrachloroethane	mg/kg	0.00089U	0.0050	04/19/12 11:46	
1,1,2-Trichloroethane	mg/kg	0.00092U	0.0050	04/19/12 11:46	
1,1-Dichloroethane	mg/kg	0.00079U	0.0050	04/19/12 11:46	
1,1-Dichloroethene	mg/kg	0.00081U	0.0050	04/19/12 11:46	
1,2,4-Trimethylbenzene	mg/kg	0.0012U	0.0050	04/19/12 11:46	
1,2-Dibromoethane (EDB)	mg/kg	0.0026U	0.0050	04/19/12 11:46	
1,2-Dichlorobenzene	mg/kg	0.0011U	0.0050	04/19/12 11:46	
1,2-Dichloroethane	mg/kg	0.00091U	0.0050	04/19/12 11:46	
1,2-Dichloropropane	mg/kg	0.0016U	0.0050	04/19/12 11:46	
1,3,5-Trimethylbenzene	mg/kg	0.0014U	0.0050	04/19/12 11:46	
1,3-Dichlorobenzene	mg/kg	0.0013U	0.0050	04/19/12 11:46	
1,4-Dichlorobenzene	mg/kg	0.0012U	0.0050	04/19/12 11:46	
2-Butanone (MEK)	mg/kg	0.0013U	0.010	04/19/12 11:46	
2-Hexanone	mg/kg	0.0012U	0.010	04/19/12 11:46	
4-Methyl-2-pentanone (MIBK)	mg/kg	0.0010U	0.010	04/19/12 11:46	
Acetone	mg/kg	0.0067J	0.010	04/19/12 11:46	
Benzene	mg/kg	0.00078U	0.0050	04/19/12 11:46	
Bromodichloromethane	mg/kg	0.0018U	0.0050	04/19/12 11:46	
Bromoform	mg/kg	0.0025U	0.0050	04/19/12 11:46	
Bromomethane	mg/kg	0.0029U	0.0050	04/19/12 11:46	
Carbon disulfide	mg/kg	0.00077U	0.0050	04/19/12 11:46	
Carbon tetrachloride	mg/kg	0.00089U	0.0050	04/19/12 11:46	
Chlorobenzene	mg/kg	0.00099U	0.0050	04/19/12 11:46	
Chloroethane	mg/kg	0.0016U	0.0050	04/19/12 11:46	
Chloroform	mg/kg	0.00071U	0.0050	04/19/12 11:46	
Chloromethane	mg/kg	0.0010U	0.0050	04/19/12 11:46	
cis-1,2-Dichloroethene	mg/kg	0.0025U	0.0050	04/19/12 11:46	
cis-1,3-Dichloropropene	mg/kg	0.0016U	0.0050	04/19/12 11:46	
Dibromochloromethane	mg/kg	0.0015U	0.0050	04/19/12 11:46	
Ethylbenzene	mg/kg	0.0026U	0.0050	04/19/12 11:46	
Isopropylbenzene (Cumene)	mg/kg	0.0011U	0.0050	04/19/12 11:46	
m&p-Xylene	mg/kg	0.0019U	0.010	04/19/12 11:46	
Methyl-tert-butyl ether	mg/kg	0.00071U	0.0050	04/19/12 11:46	
Methylene Chloride	mg/kg	0.0013U	0.0050	04/19/12 11:46	
Naphthalene	mg/kg	0.0025U	0.0050	04/19/12 11:46	
o-Xylene	mg/kg	0.0011U	0.0050	04/19/12 11:46	
Styrene	mg/kg	0.0011U	0.0050	04/19/12 11:46	
Tetrachloroethene	mg/kg	0.00073U	0.0050	04/19/12 11:46	
Toluene	mg/kg	0.00064U	0.0050	04/19/12 11:46	
TOTAL BTEX	mg/kg	0.0070U	0.030	04/19/12 11:46	
trans-1,2-Dichloroethene	mg/kg	0.00082U	0.0050	04/19/12 11:46	
trans-1,3-Dichloropropene	mg/kg	0.0016U	0.0050	04/19/12 11:46	

Date: 04/30/2012 04:35 PM

REPORT OF LABORATORY ANALYSIS

Page 16 of 21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

METHOD BLANK: 431907

Matrix: Solid

Associated Lab Samples: 3067598001, 3067598002, 3067598003, 3067598004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	mg/kg	0.00076U	0.0050	04/19/12 11:46	
Vinyl chloride	mg/kg	0.00081U	0.0050	04/19/12 11:46	
Xylene (Total)	mg/kg	0.0031U	0.015	04/19/12 11:46	
1,2-Dichloroethane-d4 (S)	%	76	70-130	04/19/12 11:46	
4-Bromofluorobenzene (S)	%	99	70-130	04/19/12 11:46	
Toluene-d8 (S)	%	89	70-130	04/19/12 11:46	

LABORATORY CONTROL SAMPLE: 431908

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	.02	0.018	92	55-141	
1,1,2,2-Tetrachloroethane	mg/kg	.02	0.016	78	58-124	
1,1,2-Trichloroethane	mg/kg	.02	0.018	91	70-118	
1,1-Dichloroethane	mg/kg	.02	0.016	80	64-127	
1,1-Dichloroethene	mg/kg	.02	0.016	82	50-133	
1,2,4-Trimethylbenzene	mg/kg	.02	0.016	81	67-130	
1,2-Dibromoethane (EDB)	mg/kg	.02	0.018	92	67-117	
1,2-Dichlorobenzene	mg/kg	.02	0.018	91	67-122	
1,2-Dichloroethane	mg/kg	.02	0.013	65	54-132	
1,2-Dichloropropane	mg/kg	.02	0.016	79	68-112	
1,3,5-Trimethylbenzene	mg/kg	.02	0.017	83	65-132	
1,3-Dichlorobenzene	mg/kg	.02	0.019	94	65-127	
1,4-Dichlorobenzene	mg/kg	.02	0.018	92	66-127	
2-Butanone (MEK)	mg/kg	.02	0.019	94	54-135	
2-Hexanone	mg/kg	.02	0.017	84	58-148	
4-Methyl-2-pentanone (MIBK)	mg/kg	.02	0.015	74	55-142	
Acetone	mg/kg	.02	0.032	159	39-200	
Benzene	mg/kg	.02	0.019	94	65-130	
Bromodichloromethane	mg/kg	.02	0.015	73	57-125	
Bromoform	mg/kg	.02	0.018	88	53-121	
Bromomethane	mg/kg	.02	0.0084	42	30-167	
Carbon disulfide	mg/kg	.02	0.021	105	49-150	
Carbon tetrachloride	mg/kg	.02	0.019	93	47-146	
Chlorobenzene	mg/kg	.02	0.019	96	67-124	
Chloroethane	mg/kg	.02	0.019	94	34-170	
Chloroform	mg/kg	.02	0.016	81	63-128	
Chloromethane	mg/kg	.02	0.012	60	39-159	
cis-1,2-Dichloroethene	mg/kg	.02	0.015	74	64-126	
cis-1,3-Dichloropropene	mg/kg	.02	0.015	76	66-124	
Dibromochloromethane	mg/kg	.02	0.018	89	56-122	
Ethylbenzene	mg/kg	.02	0.020	102	65-131	
Isopropylbenzene (Cumene)	mg/kg	.02	0.020	98	64-137	
m&p-Xylene	mg/kg	.04	0.041	102	63-136	
Methyl-tert-butyl ether	mg/kg	.02	0.018	88	71-130	
Methylene Chloride	mg/kg	.02	0.015	77	45-136	

Date: 04/30/2012 04:35 PM

REPORT OF LABORATORY ANALYSIS

Page 17 of 21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

LABORATORY CONTROL SAMPLE: 431908

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	mg/kg	.02	0.018	89	70-123	
o-Xylene	mg/kg	.02	0.021	103	68-129	
Styrene	mg/kg	.02	0.019	94	64-122	
Tetrachloroethene	mg/kg	.02	0.021	106	61-138	
Toluene	mg/kg	.02	0.019	93	63-132	
TOTAL BTEX	mg/kg		0.12			
trans-1,2-Dichloroethene	mg/kg	.02	0.016	80	60-130	
trans-1,3-Dichloropropene	mg/kg	.02	0.013	67	58-116	
Trichloroethene	mg/kg	.02	0.021	107	65-131	
Vinyl chloride	mg/kg	.02	0.017	85	49-149	
Xylene (Total)	mg/kg	.06	0.061	102	65-134	
1,2-Dichloroethane-d4 (S)	%			77	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			91	70-130	

QUALITY CONTROL DATA

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

QC Batch:	PMST/3129	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	3067598001, 3067598002, 3067598003, 3067598004		

SAMPLE DUPLICATE: 433834

Parameter	Units	3067702001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	0.59	0.63	7	20	

SAMPLE DUPLICATE: 433835

Parameter	Units	3067796001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.7	11.1	4	20	

QUALIFIERS

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/12541

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 911th Airlift Wing T-Ramp

Pace Project No.: 3067598

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3067598001	TRAMP-K6-S-4-6	EPA 3050	MPRP/8168	EPA 6010B	ICP/7612
3067598002	TRAMP-F11-S-0-2	EPA 3050	MPRP/8168	EPA 6010B	ICP/7612
3067598003	TRAMP-H0-S-6-8	EPA 3050	MPRP/8168	EPA 6010B	ICP/7612
3067598004	DUP-3	EPA 3050	MPRP/8168	EPA 6010B	ICP/7612
3067598001	TRAMP-K6-S-4-6	EPA 8260	MSV/12541		
3067598002	TRAMP-F11-S-0-2	EPA 8260	MSV/12541		
3067598003	TRAMP-H0-S-6-8	EPA 8260	MSV/12541		
3067598004	DUP-3	EPA 8260	MSV/12541		
3067598001	TRAMP-K6-S-4-6	ASTM D2974-87	PMST/3129		
3067598002	TRAMP-F11-S-0-2	ASTM D2974-87	PMST/3129		
3067598003	TRAMP-H0-S-6-8	ASTM D2974-87	PMST/3129		
3067598004	DUP-3	ASTM D2974-87	PMST/3129		

May 03, 2012

Jason McCabe
Rhea Engineers & Consultants, Inc.
4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044

RE: Project: 911th T.Ramp
Pace Project No.: 3067855

Dear Jason McCabe:

Enclosed are the analytical results for sample(s) received by the laboratory on April 20, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



David A. Pichette for
Timothy Reed
timothy.reed@pacelabs.com
Project Manager

Enclosures

cc: Erica DeLattre, Rhea Engineers & Consultants, Inc.
Dan DePra, CDM Smith



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

CERTIFICATIONS

Project: 911th T.Ramp

Pace Project No.: 3067855

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601

ACLASS DOD-ELAP Accreditation #: ADE-1544

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California/TNI Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

Delaware Certification

Florida/TNI Certification #: E87683

Guam/PADEP Certification

Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification

Indiana/PADEP Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana/TNI Certification #: LA080002

Louisiana/TNI Certification #: 4086

Maine Certification #: PA0091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188

Utah/TNI Certification #: ANTE

Virgin Island/PADEP Certification

Virginia Certification #: 00112

Virginia VELAP (Cert # 460198)

Washington Certification #: C868

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

Page 2 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE SUMMARY

Project: 911th T.Ramp

Pace Project No.: 3067855

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3067855001	Tramp-F11-W	Water	04/16/12 13:05	04/20/12 09:42
3067855002	Tramp-L2-W	Water	04/19/12 11:00	04/20/12 09:42
3067855003	Duplicate	Water	04/19/12 00:01	04/20/12 09:42
3067855004	Field Blank	Water	04/19/12 11:45	04/20/12 09:42
3067855005	Equipment Blank	Water	04/19/12 11:50	04/20/12 09:42
3067855006	Trip Blank	Water	04/16/12 00:01	04/20/12 09:42
3067855007	Tramp-I4-S-2-4	Solid	04/19/12 09:40	04/20/12 09:42
3067855008	Tramp-I4-MS	Solid	04/19/12 09:40	04/20/12 09:42
3067855009	Tramp-I4-MSD	Solid	04/19/12 09:40	04/20/12 09:42

REPORT OF LABORATORY ANALYSIS

Page 3 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE ANALYTE COUNT

Project: 911th T.Ramp

Pace Project No.: 3067855

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3067855001	Tramp-F11-W	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50
3067855002	Tramp-L2-W	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50
3067855003	Duplicate	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50
3067855004	Field Blank	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50
3067855005	Equipment Blank	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50
3067855006	Trip Blank	EPA 8260	JAS	50
3067855007	Tramp-I4-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067855008	Tramp-I4-MS	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3067855009	Tramp-I4-MSD	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1

REPORT OF LABORATORY ANALYSIS

Page 4 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911th T.Ramp

Pace Project No.: 3067855

Method: EPA 8011

Description: 8011 GCS EDB and DBCP

Client: CDM Smith

Date: May 03, 2012

General Information:

5 samples were analyzed for EPA 8011. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 5 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911th T.Ramp

Pace Project No.: 3067855

Method: EPA 200.7

Description: 200.7 Metals, Dissolved

Client: CDM Smith

Date: May 03, 2012

General Information:

5 samples were analyzed for EPA 200.7. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 6 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911th T.Ramp
Pace Project No.: 3067855

Method: EPA 6010B
Description: 6010 MET ICP
Client: CDM Smith
Date: May 03, 2012

General Information:

3 samples were analyzed for EPA 6010B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: MPRP/8168

D6: The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 432771)
- Lead

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 7 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911th T.Ramp

Pace Project No.: 3067855

Method: EPA 8260

Description: 8260 MSV 5030 Low Level

Client: CDM Smith

Date: May 03, 2012

General Information:

3 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

QC Batch: MSV/12561

B: Analyte was detected in the associated method blank.

- BLANK (Lab ID: 432740)
- Acetone

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/12561

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 432741)
- Acetone

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/12561

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 3067855007

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 432742)
 - 1,2,4-Trichlorobenzene
 - 1,2-Dichlorobenzene
 - 2-Butanone (MEK)
 - 4-Methyl-2-pentanone (MIBK)

REPORT OF LABORATORY ANALYSIS

Page 8 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911th T.Ramp

Pace Project No.: 3067855

Method: EPA 8260

Description: 8260 MSV 5030 Low Level

Client: CDM Smith

Date: May 03, 2012

QC Batch: MSV/12561

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 3067855007

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- Naphthalene
- MSD (Lab ID: 432743)
 - 1,2,4-Trichlorobenzene
 - 1,2-Dichlorobenzene
 - 1,3-Dichlorobenzene
 - 1,4-Dichlorobenzene
 - 2-Butanone (MEK)
 - Naphthalene

R1: RPD value was outside control limits.

- MSD (Lab ID: 432743)
 - 1,2,4-Trichlorobenzene
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - 1,3-Dichlorobenzene
 - 1,4-Dichlorobenzene
 - Isopropylbenzene (Cumene)
 - Naphthalene

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: MSV/12561

C6: Analyte is a common laboratory contaminant (confirmed by presence in method blank).

- BLANK (Lab ID: 432740)
 - Acetone

REPORT OF LABORATORY ANALYSIS

Page 9 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 911th T.Ramp
Pace Project No.: 3067855

Method: EPA 8260
Description: 8260 MSV
Client: CDM Smith
Date: May 03, 2012

General Information:

6 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

QC Batch: MSV/12550

B: Analyte was detected in the associated method blank.

- BLANK (Lab ID: 432597)
- Methylene Chloride

QC Batch: MSV/12566

B: Analyte was detected in the associated method blank.

- BLANK (Lab ID: 433104)
- Methylene Chloride

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/12566

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 3067783004

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 433106)
- Acetone

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 911th T.Ramp

Pace Project No.: 3067855

Method: EPA 8260

Description: 8260 MSV

Client: CDM Smith

Date: May 03, 2012

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: MSV/12550

C9: Common Laboratory Contaminant.

- BLANK (Lab ID: 432597)
- Methylene Chloride

QC Batch: MSV/12566

C9: Common Laboratory Contaminant.

- BLANK (Lab ID: 433104)
- Methylene Chloride

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 11 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th T.Ramp
Pace Project No.: 3067855

Sample: Tramp-F11-W		Lab ID: 3067855001	Collected: 04/16/12 13:05	Received: 04/20/12 09:42	Matrix: Water				
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP		Analytical Method: EPA 8011 Preparation Method: EPA 8011							
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	04/23/12 09:09	04/24/12 05:39	106-93-4	
200.7 Metals, Dissolved		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Lead, Dissolved	4.9J	ug/L	5.0	1.0	1	04/23/12 17:00	04/24/12 17:21	7439-92-1	
8260 MSV		Analytical Method: EPA 8260							
Acetone	2.6U	ug/L	10.0	2.6	1		04/23/12 15:53	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		04/23/12 15:53	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		04/23/12 15:53	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		04/23/12 15:53	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		04/23/12 15:53	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		04/23/12 15:53	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		04/23/12 15:53	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		04/23/12 15:53	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		04/23/12 15:53	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 15:53	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		04/23/12 15:53	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		04/23/12 15:53	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		04/23/12 15:53	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		04/23/12 15:53	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		04/23/12 15:53	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		04/23/12 15:53	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		04/23/12 15:53	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		04/23/12 15:53	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		04/23/12 15:53	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		04/23/12 15:53	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		04/23/12 15:53	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		04/23/12 15:53	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		04/23/12 15:53	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		04/23/12 15:53	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		04/23/12 15:53	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		04/23/12 15:53	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 15:53	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		04/23/12 15:53	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		04/23/12 15:53	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		04/23/12 15:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		04/23/12 15:53	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		04/23/12 15:53	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		04/23/12 15:53	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		04/23/12 15:53	100-42-5	
1,1,1,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		04/23/12 15:53	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		04/23/12 15:53	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		04/23/12 15:53	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		04/23/12 15:53	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		04/23/12 15:53	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		04/23/12 15:53	79-00-5	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 12 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Tramp-F11-W		Lab ID: 3067855001		Collected: 04/16/12 13:05		Received: 04/20/12 09:42		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Trichloroethene	0.15U	ug/L	1.0	0.15	1		04/23/12 15:53	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		04/23/12 15:53	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 15:53	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		04/23/12 15:53	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		04/23/12 15:53	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		04/23/12 15:53	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		04/23/12 15:53	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		04/23/12 15:53	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%	70-130		1		04/23/12 15:53	17060-07-0	
Toluene-d8 (S)	91	%	70-130		1		04/23/12 15:53	2037-26-5	

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Tramp-L2-W		Lab ID: 3067855002	Collected: 04/19/12 11:00	Received: 04/20/12 09:42	Matrix: Water				
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP		Analytical Method: EPA 8011 Preparation Method: EPA 8011							
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	04/23/12 09:12	04/24/12 06:00	106-93-4	
200.7 Metals, Dissolved		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Lead, Dissolved	2.3J	ug/L	5.0	1.0	1	04/23/12 17:00	04/24/12 17:24	7439-92-1	
8260 MSV		Analytical Method: EPA 8260							
Acetone	3.1J	ug/L	10.0	2.6	1		04/23/12 21:37	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		04/23/12 21:37	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		04/23/12 21:37	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		04/23/12 21:37	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		04/23/12 21:37	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		04/23/12 21:37	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		04/23/12 21:37	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		04/23/12 21:37	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		04/23/12 21:37	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 21:37	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		04/23/12 21:37	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		04/23/12 21:37	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		04/23/12 21:37	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		04/23/12 21:37	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		04/23/12 21:37	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		04/23/12 21:37	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		04/23/12 21:37	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		04/23/12 21:37	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		04/23/12 21:37	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		04/23/12 21:37	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		04/23/12 21:37	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		04/23/12 21:37	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		04/23/12 21:37	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		04/23/12 21:37	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		04/23/12 21:37	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		04/23/12 21:37	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 21:37	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		04/23/12 21:37	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		04/23/12 21:37	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		04/23/12 21:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	4.6J	ug/L	10.0	0.29	1		04/23/12 21:37	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		04/23/12 21:37	1634-04-4	
Naphthalene	1.9J	ug/L	2.0	0.33	1		04/23/12 21:37	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		04/23/12 21:37	100-42-5	
1,1,2,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		04/23/12 21:37	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		04/23/12 21:37	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		04/23/12 21:37	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		04/23/12 21:37	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		04/23/12 21:37	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		04/23/12 21:37	79-00-5	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 14 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Tramp-L2-W		Lab ID: 3067855002		Collected: 04/19/12 11:00		Received: 04/20/12 09:42		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Trichloroethene	0.15U	ug/L	1.0	0.15	1		04/23/12 21:37	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		04/23/12 21:37	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 21:37	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		04/23/12 21:37	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		04/23/12 21:37	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		04/23/12 21:37	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		04/23/12 21:37	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		04/23/12 21:37	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		04/23/12 21:37	17060-07-0	
Toluene-d8 (S)	94	%	70-130		1		04/23/12 21:37	2037-26-5	

ANALYTICAL RESULTS

Project: 911th T.Ramp
Pace Project No.: 3067855

Sample: Duplicate		Lab ID: 3067855003	Collected: 04/19/12 00:01	Received: 04/20/12 09:42	Matrix: Water				
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP		Analytical Method: EPA 8011 Preparation Method: EPA 8011							
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	04/23/12 09:12	04/24/12 06:21	106-93-4	
200.7 Metals, Dissolved		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Lead, Dissolved	2.1J	ug/L	5.0	1.0	1	04/23/12 17:00	04/24/12 17:27	7439-92-1	
8260 MSV		Analytical Method: EPA 8260							
Acetone	2.6U	ug/L	10.0	2.6	1		04/23/12 16:46	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		04/23/12 16:46	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		04/23/12 16:46	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		04/23/12 16:46	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		04/23/12 16:46	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		04/23/12 16:46	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		04/23/12 16:46	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		04/23/12 16:46	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		04/23/12 16:46	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 16:46	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		04/23/12 16:46	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		04/23/12 16:46	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		04/23/12 16:46	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		04/23/12 16:46	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		04/23/12 16:46	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		04/23/12 16:46	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		04/23/12 16:46	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		04/23/12 16:46	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		04/23/12 16:46	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		04/23/12 16:46	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		04/23/12 16:46	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		04/23/12 16:46	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		04/23/12 16:46	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		04/23/12 16:46	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		04/23/12 16:46	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		04/23/12 16:46	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 16:46	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		04/23/12 16:46	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		04/23/12 16:46	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		04/23/12 16:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		04/23/12 16:46	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		04/23/12 16:46	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		04/23/12 16:46	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		04/23/12 16:46	100-42-5	
1,1,1,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		04/23/12 16:46	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		04/23/12 16:46	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		04/23/12 16:46	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		04/23/12 16:46	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		04/23/12 16:46	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		04/23/12 16:46	79-00-5	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 16 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Duplicate		Lab ID: 3067855003		Collected: 04/19/12 00:01		Received: 04/20/12 09:42		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Trichloroethene	0.15U	ug/L	1.0	0.15	1		04/23/12 16:46	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		04/23/12 16:46	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 16:46	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		04/23/12 16:46	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		04/23/12 16:46	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		04/23/12 16:46	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		04/23/12 16:46	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		04/23/12 16:46	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%	70-130		1		04/23/12 16:46	17060-07-0	
Toluene-d8 (S)	90	%	70-130		1		04/23/12 16:46	2037-26-5	

ANALYTICAL RESULTS

Project: 911th T.Ramp
Pace Project No.: 3067855

Sample: Field Blank		Lab ID: 3067855004	Collected: 04/19/12 11:45	Received: 04/20/12 09:42	Matrix: Water				
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP		Analytical Method: EPA 8011 Preparation Method: EPA 8011							
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	04/23/12 09:12	04/24/12 06:42	106-93-4	
200.7 Metals, Dissolved		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Lead, Dissolved	2.9J	ug/L	5.0	1.0	1	04/23/12 17:00	04/24/12 17:30	7439-92-1	
8260 MSV		Analytical Method: EPA 8260							
Acetone	4.3J	ug/L	10.0	2.6	1		04/25/12 13:40	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		04/25/12 13:40	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		04/25/12 13:40	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		04/25/12 13:40	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		04/25/12 13:40	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		04/25/12 13:40	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		04/25/12 13:40	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		04/25/12 13:40	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		04/25/12 13:40	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		04/25/12 13:40	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		04/25/12 13:40	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		04/25/12 13:40	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		04/25/12 13:40	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		04/25/12 13:40	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		04/25/12 13:40	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		04/25/12 13:40	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		04/25/12 13:40	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		04/25/12 13:40	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		04/25/12 13:40	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		04/25/12 13:40	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		04/25/12 13:40	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		04/25/12 13:40	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		04/25/12 13:40	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		04/25/12 13:40	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		04/25/12 13:40	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		04/25/12 13:40	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		04/25/12 13:40	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		04/25/12 13:40	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		04/25/12 13:40	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		04/25/12 13:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		04/25/12 13:40	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		04/25/12 13:40	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		04/25/12 13:40	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		04/25/12 13:40	100-42-5	
1,1,1,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		04/25/12 13:40	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		04/25/12 13:40	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		04/25/12 13:40	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		04/25/12 13:40	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		04/25/12 13:40	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		04/25/12 13:40	79-00-5	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 18 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Field Blank		Lab ID: 3067855004	Collected: 04/19/12 11:45	Received: 04/20/12 09:42	Matrix: Water				
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Trichloroethene	0.15U	ug/L	1.0	0.15	1		04/25/12 13:40	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		04/25/12 13:40	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		04/25/12 13:40	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		04/25/12 13:40	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		04/25/12 13:40	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		04/25/12 13:40	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		04/25/12 13:40	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		04/25/12 13:40	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	70-130		1		04/25/12 13:40	17060-07-0	
Toluene-d8 (S)	93	%	70-130		1		04/25/12 13:40	2037-26-5	

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Equipment Blank		Lab ID: 3067855005	Collected: 04/19/12 11:50	Received: 04/20/12 09:42	Matrix: Water				
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP		Analytical Method: EPA 8011 Preparation Method: EPA 8011							
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	04/23/12 09:12	04/24/12 07:03	106-93-4	
200.7 Metals, Dissolved		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Lead, Dissolved	2.5J	ug/L	5.0	1.0	1	04/23/12 17:00	04/24/12 17:33	7439-92-1	
8260 MSV		Analytical Method: EPA 8260							
Acetone	6.4J	ug/L	10.0	2.6	1		04/23/12 17:39	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		04/23/12 17:39	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		04/23/12 17:39	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		04/23/12 17:39	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		04/23/12 17:39	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		04/23/12 17:39	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		04/23/12 17:39	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		04/23/12 17:39	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		04/23/12 17:39	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 17:39	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		04/23/12 17:39	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		04/23/12 17:39	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		04/23/12 17:39	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		04/23/12 17:39	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		04/23/12 17:39	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		04/23/12 17:39	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		04/23/12 17:39	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		04/23/12 17:39	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		04/23/12 17:39	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		04/23/12 17:39	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		04/23/12 17:39	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		04/23/12 17:39	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		04/23/12 17:39	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		04/23/12 17:39	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		04/23/12 17:39	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		04/23/12 17:39	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 17:39	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		04/23/12 17:39	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		04/23/12 17:39	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		04/23/12 17:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		04/23/12 17:39	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		04/23/12 17:39	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		04/23/12 17:39	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		04/23/12 17:39	100-42-5	
1,1,1,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		04/23/12 17:39	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		04/23/12 17:39	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		04/23/12 17:39	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		04/23/12 17:39	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		04/23/12 17:39	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		04/23/12 17:39	79-00-5	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 20 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Equipment Blank		Lab ID: 3067855005		Collected: 04/19/12 11:50		Received: 04/20/12 09:42		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Trichloroethene	0.15U	ug/L	1.0	0.15	1		04/23/12 17:39	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		04/23/12 17:39	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 17:39	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		04/23/12 17:39	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		04/23/12 17:39	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		04/23/12 17:39	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		04/23/12 17:39	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		04/23/12 17:39	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70-130		1		04/23/12 17:39	17060-07-0	
Toluene-d8 (S)	91	%	70-130		1		04/23/12 17:39	2037-26-5	

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Trip Blank **Lab ID:** 3067855006 **Collected:** 04/16/12 00:01 **Received:** 04/20/12 09:42 **Matrix:** Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Acetone	2.6U	ug/L	10.0	2.6	1		04/23/12 18:05	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		04/23/12 18:05	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		04/23/12 18:05	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		04/23/12 18:05	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		04/23/12 18:05	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		04/23/12 18:05	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		04/23/12 18:05	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		04/23/12 18:05	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		04/23/12 18:05	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 18:05	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		04/23/12 18:05	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		04/23/12 18:05	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		04/23/12 18:05	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		04/23/12 18:05	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		04/23/12 18:05	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		04/23/12 18:05	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		04/23/12 18:05	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		04/23/12 18:05	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		04/23/12 18:05	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		04/23/12 18:05	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		04/23/12 18:05	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		04/23/12 18:05	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		04/23/12 18:05	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		04/23/12 18:05	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		04/23/12 18:05	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		04/23/12 18:05	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 18:05	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		04/23/12 18:05	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		04/23/12 18:05	98-82-8	
Methylene Chloride	1.0	ug/L	1.0	0.23	1		04/23/12 18:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		04/23/12 18:05	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		04/23/12 18:05	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		04/23/12 18:05	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		04/23/12 18:05	100-42-5	
1,1,2,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		04/23/12 18:05	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		04/23/12 18:05	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		04/23/12 18:05	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		04/23/12 18:05	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		04/23/12 18:05	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		04/23/12 18:05	79-00-5	
Trichloroethene	0.15U	ug/L	1.0	0.15	1		04/23/12 18:05	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		04/23/12 18:05	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		04/23/12 18:05	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		04/23/12 18:05	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		04/23/12 18:05	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		04/23/12 18:05	179601-23-1	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 22 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Trip Blank		Lab ID: 3067855006		Collected: 04/16/12 00:01		Received: 04/20/12 09:42		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
o-Xylene	0.10U	ug/L	1.0	0.10	1		04/23/12 18:05	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		04/23/12 18:05	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%	70-130		1		04/23/12 18:05	17060-07-0	
Toluene-d8 (S)	91	%	70-130		1		04/23/12 18:05	2037-26-5	

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Tramp-I4-S-2-4 **Lab ID: 3067855007** Collected: 04/19/12 09:40 Received: 04/20/12 09:42 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	22.5	mg/kg	0.35	0.30	1	04/23/12 10:55	04/24/12 11:10	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.036	mg/kg	0.0092	0.0018	1		04/23/12 18:33	67-64-1	
Benzene	0.0023J	mg/kg	0.0046	0.00072	1		04/23/12 18:33	71-43-2	
Bromodichloromethane	0.0017U	mg/kg	0.0046	0.0017	1		04/23/12 18:33	75-27-4	
Bromoform	0.0023U	mg/kg	0.0046	0.0023	1		04/23/12 18:33	75-25-2	
Bromomethane	0.0027U	mg/kg	0.0046	0.0027	1		04/23/12 18:33	74-83-9	
TOTAL BTEX	0.0065U	mg/kg	0.028	0.0065	1		04/23/12 18:33		
2-Butanone (MEK)	0.0012U	mg/kg	0.0092	0.0012	1		04/23/12 18:33	78-93-3	
Carbon disulfide	0.0024J	mg/kg	0.0046	0.00071	1		04/23/12 18:33	75-15-0	
Carbon tetrachloride	0.00082U	mg/kg	0.0046	0.00082	1		04/23/12 18:33	56-23-5	
Chlorobenzene	0.00091U	mg/kg	0.0046	0.00091	1		04/23/12 18:33	108-90-7	
Chloroethane	0.0015U	mg/kg	0.0046	0.0015	1		04/23/12 18:33	75-00-3	
Chloroform	0.00066U	mg/kg	0.0046	0.00066	1		04/23/12 18:33	67-66-3	
Chloromethane	0.00097U	mg/kg	0.0046	0.00097	1		04/23/12 18:33	74-87-3	
Dibromochloromethane	0.0014U	mg/kg	0.0046	0.0014	1		04/23/12 18:33	124-48-1	
1,2-Dibromoethane (EDB)	0.0024U	mg/kg	0.0046	0.0024	1		04/23/12 18:33	106-93-4	
1,2-Dichlorobenzene	0.0010U	mg/kg	0.0046	0.0010	1		04/23/12 18:33	95-50-1	
1,3-Dichlorobenzene	0.0012U	mg/kg	0.0046	0.0012	1		04/23/12 18:33	541-73-1	
1,4-Dichlorobenzene	0.0011U	mg/kg	0.0046	0.0011	1		04/23/12 18:33	106-46-7	
1,1-Dichloroethane	0.00073U	mg/kg	0.0046	0.00073	1		04/23/12 18:33	75-34-3	
1,2-Dichloroethane	0.00084U	mg/kg	0.0046	0.00084	1		04/23/12 18:33	107-06-2	
1,2-Dichloroethene (Total)	0.0030U	mg/kg	0.0092	0.0030	1		04/23/12 18:33	540-59-0	
1,1-Dichloroethene	0.00075U	mg/kg	0.0046	0.00075	1		04/23/12 18:33	75-35-4	
cis-1,2-Dichloroethene	0.0023U	mg/kg	0.0046	0.0023	1		04/23/12 18:33	156-59-2	
trans-1,2-Dichloroethene	0.00076U	mg/kg	0.0046	0.00076	1		04/23/12 18:33	156-60-5	
1,2-Dichloropropane	0.0015U	mg/kg	0.0046	0.0015	1		04/23/12 18:33	78-87-5	
cis-1,3-Dichloropropene	0.0014U	mg/kg	0.0046	0.0014	1		04/23/12 18:33	10061-01-5	
trans-1,3-Dichloropropene	0.0015U	mg/kg	0.0046	0.0015	1		04/23/12 18:33	10061-02-6	
Ethylbenzene	0.0024U	mg/kg	0.0046	0.0024	1		04/23/12 18:33	100-41-4	
2-Hexanone	0.0011U	mg/kg	0.0092	0.0011	1		04/23/12 18:33	591-78-6	
Isopropylbenzene (Cumene)	0.00098U	mg/kg	0.0046	0.00098	1		04/23/12 18:33	98-82-8	
Methylene Chloride	0.0012U	mg/kg	0.0046	0.0012	1		04/23/12 18:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.00095U	mg/kg	0.0092	0.00095	1		04/23/12 18:33	108-10-1	
Methyl-tert-butyl ether	0.00066U	mg/kg	0.0046	0.00066	1		04/23/12 18:33	1634-04-4	
Naphthalene	0.0023U	mg/kg	0.0046	0.0023	1		04/23/12 18:33	91-20-3	
Styrene	0.0010U	mg/kg	0.0046	0.0010	1		04/23/12 18:33	100-42-5	
1,1,2,2-Tetrachloroethane	0.00082U	mg/kg	0.0046	0.00082	1		04/23/12 18:33	79-34-5	
Tetrachloroethene	0.00067U	mg/kg	0.0046	0.00067	1		04/23/12 18:33	127-18-4	
Toluene	0.00080J	mg/kg	0.0046	0.00059	1		04/23/12 18:33	108-88-3	
1,1,1-Trichloroethane	0.0024U	mg/kg	0.0046	0.0024	1		04/23/12 18:33	71-55-6	
1,1,2-Trichloroethane	0.00085U	mg/kg	0.0046	0.00085	1		04/23/12 18:33	79-00-5	
Trichloroethene	0.00070U	mg/kg	0.0046	0.00070	1		04/23/12 18:33	79-01-6	
1,2,4-Trimethylbenzene	0.0011U	mg/kg	0.0046	0.0011	1		04/23/12 18:33	95-63-6	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 24 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Tramp-I4-S-2-4 **Lab ID: 3067855007** Collected: 04/19/12 09:40 Received: 04/20/12 09:42 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0012U	mg/kg	0.0046	0.0012	1		04/23/12 18:33	108-67-8	
Vinyl chloride	0.00075U	mg/kg	0.0046	0.00075	1		04/23/12 18:33	75-01-4	
Xylene (Total)	0.0028U	mg/kg	0.014	0.0028	1		04/23/12 18:33	1330-20-7	
m&p-Xylene	0.0018U	mg/kg	0.0092	0.0018	1		04/23/12 18:33	179601-23-1	
o-Xylene	0.0010U	mg/kg	0.0046	0.0010	1		04/23/12 18:33	95-47-6	
Surrogates									
Toluene-d8 (S)	87	%	70-130		1		04/23/12 18:33	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		04/23/12 18:33	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		04/23/12 18:33	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	11.0	%	0.10	0.10	1		04/25/12 16:28		

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Tramp-I4-MS **Lab ID: 3067855008** Collected: 04/19/12 09:40 Received: 04/20/12 09:42 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	61.5	mg/kg	0.43	0.36	1	04/23/12 10:55	04/24/12 11:16	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.058	mg/kg	0.0099	0.0019	1		04/23/12 18:57	67-64-1	
Benzene	0.022	mg/kg	0.0050	0.00077	1		04/23/12 18:57	71-43-2	
Bromodichloromethane	0.017	mg/kg	0.0050	0.0018	1		04/23/12 18:57	75-27-4	
Bromoform	0.016	mg/kg	0.0050	0.0025	1		04/23/12 18:57	75-25-2	
Bromomethane	0.0083	mg/kg	0.0050	0.0029	1		04/23/12 18:57	74-83-9	
TOTAL BTEX	0.11	mg/kg	0.030	0.0070	1		04/23/12 18:57		
2-Butanone (MEK)	0.035	mg/kg	0.0099	0.0012	1		04/23/12 18:57	78-93-3	
Carbon disulfide	0.024	mg/kg	0.0050	0.00076	1		04/23/12 18:57	75-15-0	
Carbon tetrachloride	0.022	mg/kg	0.0050	0.00088	1		04/23/12 18:57	56-23-5	
Chlorobenzene	0.016	mg/kg	0.0050	0.00098	1		04/23/12 18:57	108-90-7	
Chloroethane	0.021	mg/kg	0.0050	0.0016	1		04/23/12 18:57	75-00-3	
Chloroform	0.019	mg/kg	0.0050	0.00071	1		04/23/12 18:57	67-66-3	
Chloromethane	0.021	mg/kg	0.0050	0.0010	1		04/23/12 18:57	74-87-3	
Dibromochloromethane	0.016	mg/kg	0.0050	0.0015	1		04/23/12 18:57	124-48-1	
1,2-Dibromoethane (EDB)	0.017	mg/kg	0.0050	0.0026	1		04/23/12 18:57	106-93-4	
1,2-Dichlorobenzene	0.013	mg/kg	0.0050	0.0011	1		04/23/12 18:57	95-50-1	
1,3-Dichlorobenzene	0.013	mg/kg	0.0050	0.0013	1		04/23/12 18:57	541-73-1	
1,4-Dichlorobenzene	0.013	mg/kg	0.0050	0.0012	1		04/23/12 18:57	106-46-7	
1,1-Dichloroethane	0.020	mg/kg	0.0050	0.00079	1		04/23/12 18:57	75-34-3	
1,2-Dichloroethane	0.018	mg/kg	0.0050	0.00090	1		04/23/12 18:57	107-06-2	
1,2-Dichloroethene (Total)	0.038	mg/kg	0.0099	0.0033	1		04/23/12 18:57	540-59-0	
1,1-Dichloroethene	0.021	mg/kg	0.0050	0.00080	1		04/23/12 18:57	75-35-4	
cis-1,2-Dichloroethene	0.019	mg/kg	0.0050	0.0024	1		04/23/12 18:57	156-59-2	
trans-1,2-Dichloroethene	0.020	mg/kg	0.0050	0.00081	1		04/23/12 18:57	156-60-5	
1,2-Dichloropropane	0.020	mg/kg	0.0050	0.0016	1		04/23/12 18:57	78-87-5	
cis-1,3-Dichloropropene	0.018	mg/kg	0.0050	0.0016	1		04/23/12 18:57	10061-01-5	
trans-1,3-Dichloropropene	0.015	mg/kg	0.0050	0.0016	1		04/23/12 18:57	10061-02-6	
Ethylbenzene	0.018	mg/kg	0.0050	0.0025	1		04/23/12 18:57	100-41-4	
2-Hexanone	0.026	mg/kg	0.0099	0.0012	1		04/23/12 18:57	591-78-6	
Isopropylbenzene (Cumene)	0.020	mg/kg	0.0050	0.0011	1		04/23/12 18:57	98-82-8	
Methylene Chloride	0.018	mg/kg	0.0050	0.0013	1		04/23/12 18:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.028	mg/kg	0.0099	0.0010	1		04/23/12 18:57	108-10-1	
Methyl-tert-butyl ether	0.022	mg/kg	0.0050	0.00071	1		04/23/12 18:57	1634-04-4	
Naphthalene	0.014	mg/kg	0.0050	0.0025	1		04/23/12 18:57	91-20-3	
Styrene	0.015	mg/kg	0.0050	0.0011	1		04/23/12 18:57	100-42-5	
1,1,2,2-Tetrachloroethane	0.020	mg/kg	0.0050	0.00088	1		04/23/12 18:57	79-34-5	
Tetrachloroethene	0.018	mg/kg	0.0050	0.00072	1		04/23/12 18:57	127-18-4	
Toluene	0.019	mg/kg	0.0050	0.00064	1		04/23/12 18:57	108-88-3	
1,1,1-Trichloroethane	0.021	mg/kg	0.0050	0.0026	1		04/23/12 18:57	71-55-6	
1,1,2-Trichloroethane	0.018	mg/kg	0.0050	0.00091	1		04/23/12 18:57	79-00-5	
Trichloroethene	0.019	mg/kg	0.0050	0.00075	1		04/23/12 18:57	79-01-6	
1,2,4-Trimethylbenzene	0.016	mg/kg	0.0050	0.0012	1		04/23/12 18:57	95-63-6	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 26 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Tramp-I4-MS **Lab ID: 3067855008** Collected: 04/19/12 09:40 Received: 04/20/12 09:42 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.017	mg/kg	0.0050	0.0013	1		04/23/12 18:57	108-67-8	
Vinyl chloride	0.023	mg/kg	0.0050	0.00080	1		04/23/12 18:57	75-01-4	
Xylene (Total)	0.053	mg/kg	0.015	0.0030	1		04/23/12 18:57	1330-20-7	
m&p-Xylene	0.036	mg/kg	0.0099	0.0019	1		04/23/12 18:57	179601-23-1	
o-Xylene	0.017	mg/kg	0.0050	0.0011	1		04/23/12 18:57	95-47-6	
Surrogates									
Toluene-d8 (S)	89	%	70-130		1		04/23/12 18:57	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130		1		04/23/12 18:57	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		04/23/12 18:57	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	10.1	%	0.10	0.10	1		04/25/12 16:29		

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Tramp-I4-MSD **Lab ID: 3067855009** Collected: 04/19/12 09:40 Received: 04/20/12 09:42 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	57.8	mg/kg	0.38	0.32	1	04/23/12 10:55	04/24/12 11:19	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.054	mg/kg	0.0086	0.0017	1		04/23/12 19:21	67-64-1	
Benzene	0.019	mg/kg	0.0043	0.00067	1		04/23/12 19:21	71-43-2	
Bromodichloromethane	0.014	mg/kg	0.0043	0.0016	1		04/23/12 19:21	75-27-4	
Bromoform	0.012	mg/kg	0.0043	0.0022	1		04/23/12 19:21	75-25-2	
Bromomethane	0.0072	mg/kg	0.0043	0.0025	1		04/23/12 19:21	74-83-9	
TOTAL BTEX	0.087	mg/kg	0.026	0.0061	1		04/23/12 19:21		
2-Butanone (MEK)	0.028	mg/kg	0.0086	0.0011	1		04/23/12 19:21	78-93-3	
Carbon disulfide	0.021	mg/kg	0.0043	0.00066	1		04/23/12 19:21	75-15-0	
Carbon tetrachloride	0.017	mg/kg	0.0043	0.00077	1		04/23/12 19:21	56-23-5	
Chlorobenzene	0.012	mg/kg	0.0043	0.00086	1		04/23/12 19:21	108-90-7	
Chloroethane	0.016	mg/kg	0.0043	0.0014	1		04/23/12 19:21	75-00-3	
Chloroform	0.016	mg/kg	0.0043	0.00061	1		04/23/12 19:21	67-66-3	
Chloromethane	0.017	mg/kg	0.0043	0.00091	1		04/23/12 19:21	74-87-3	
Dibromochloromethane	0.013	mg/kg	0.0043	0.0013	1		04/23/12 19:21	124-48-1	
1,2-Dibromoethane (EDB)	0.014	mg/kg	0.0043	0.0023	1		04/23/12 19:21	106-93-4	
1,2-Dichlorobenzene	0.0094	mg/kg	0.0043	0.00094	1		04/23/12 19:21	95-50-1	
1,3-Dichlorobenzene	0.0096	mg/kg	0.0043	0.0011	1		04/23/12 19:21	541-73-1	
1,4-Dichlorobenzene	0.0094	mg/kg	0.0043	0.0011	1		04/23/12 19:21	106-46-7	
1,1-Dichloroethane	0.016	mg/kg	0.0043	0.00068	1		04/23/12 19:21	75-34-3	
1,2-Dichloroethane	0.014	mg/kg	0.0043	0.00079	1		04/23/12 19:21	107-06-2	
1,2-Dichloroethene (Total)	0.031	mg/kg	0.0086	0.0028	1		04/23/12 19:21	540-59-0	
1,1-Dichloroethene	0.017	mg/kg	0.0043	0.00070	1		04/23/12 19:21	75-35-4	
cis-1,2-Dichloroethene	0.015	mg/kg	0.0043	0.0021	1		04/23/12 19:21	156-59-2	
trans-1,2-Dichloroethene	0.016	mg/kg	0.0043	0.00071	1		04/23/12 19:21	156-60-5	
1,2-Dichloropropane	0.016	mg/kg	0.0043	0.0014	1		04/23/12 19:21	78-87-5	
cis-1,3-Dichloropropene	0.014	mg/kg	0.0043	0.0014	1		04/23/12 19:21	10061-01-5	
trans-1,3-Dichloropropene	0.012	mg/kg	0.0043	0.0014	1		04/23/12 19:21	10061-02-6	
Ethylbenzene	0.014	mg/kg	0.0043	0.0022	1		04/23/12 19:21	100-41-4	
2-Hexanone	0.020	mg/kg	0.0086	0.0010	1		04/23/12 19:21	591-78-6	
Isopropylbenzene (Cumene)	0.015	mg/kg	0.0043	0.00092	1		04/23/12 19:21	98-82-8	
Methylene Chloride	0.015	mg/kg	0.0043	0.0012	1		04/23/12 19:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.023	mg/kg	0.0086	0.00089	1		04/23/12 19:21	108-10-1	
Methyl-tert-butyl ether	0.018	mg/kg	0.0043	0.00061	1		04/23/12 19:21	1634-04-4	
Naphthalene	0.0097	mg/kg	0.0043	0.0022	1		04/23/12 19:21	91-20-3	
Styrene	0.011	mg/kg	0.0043	0.00096	1		04/23/12 19:21	100-42-5	
1,1,2,2-Tetrachloroethane	0.014	mg/kg	0.0043	0.00077	1		04/23/12 19:21	79-34-5	
Tetrachloroethene	0.014	mg/kg	0.0043	0.00063	1		04/23/12 19:21	127-18-4	
Toluene	0.015	mg/kg	0.0043	0.00056	1		04/23/12 19:21	108-88-3	
1,1,1-Trichloroethane	0.017	mg/kg	0.0043	0.0022	1		04/23/12 19:21	71-55-6	
1,1,2-Trichloroethane	0.014	mg/kg	0.0043	0.00080	1		04/23/12 19:21	79-00-5	
Trichloroethene	0.015	mg/kg	0.0043	0.00065	1		04/23/12 19:21	79-01-6	
1,2,4-Trimethylbenzene	0.012	mg/kg	0.0043	0.0010	1		04/23/12 19:21	95-63-6	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 28 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 911th T.Ramp

Pace Project No.: 3067855

Sample: Tramp-I4-MSD **Lab ID: 3067855009** Collected: 04/19/12 09:40 Received: 04/20/12 09:42 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.012	mg/kg	0.0043	0.0012	1		04/23/12 19:21	108-67-8	
Vinyl chloride	0.019	mg/kg	0.0043	0.00070	1		04/23/12 19:21	75-01-4	
Xylene (Total)	0.040	mg/kg	0.013	0.0026	1		04/23/12 19:21	1330-20-7	
m&p-Xylene	0.027	mg/kg	0.0086	0.0017	1		04/23/12 19:21	179601-23-1	
o-Xylene	0.013	mg/kg	0.0043	0.00098	1		04/23/12 19:21	95-47-6	
Surrogates									
Toluene-d8 (S)	90	%	70-130		1		04/23/12 19:21	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130		1		04/23/12 19:21	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		04/23/12 19:21	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	9.9	%	0.10	0.10	1		04/25/12 16:29		

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

QC Batch: GCSV/4361 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 3067855001, 3067855002, 3067855003, 3067855004, 3067855005

METHOD BLANK: 432585 Matrix: Water
Associated Lab Samples: 3067855001, 3067855002, 3067855003, 3067855004, 3067855005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.0079U	0.050	04/23/12 22:42	

LABORATORY CONTROL SAMPLE: 432586

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.25	0.25	100	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 432587 432588

Parameter	Units	3067811001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	.4	.4	0.45	0.48	111	120	60-140	7	25	

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

QC Batch: MPRP/8169

Analysis Method: EPA 200.7

QC Batch Method: EPA 200.7

Analysis Description: 200.7 Metals, Dissolved

Associated Lab Samples: 3067855001, 3067855002, 3067855003, 3067855004, 3067855005

METHOD BLANK: 432950

Matrix: Water

Associated Lab Samples: 3067855001, 3067855002, 3067855003, 3067855004, 3067855005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead, Dissolved	ug/L	1.8J	5.0	04/24/12 15:56	

LABORATORY CONTROL SAMPLE: 432951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead, Dissolved	ug/L	500	520	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 432953 432954

Parameter	Units	3067372001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead, Dissolved	ug/L	ND	500	500	535	528	107	105	80-120	1	20	

MATRIX SPIKE SAMPLE: 432956

Parameter	Units	3067673002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead, Dissolved	ug/L	ND	500	521	104	80-120	

SAMPLE DUPLICATE: 432952

Parameter	Units	3067372001 Result	Dup Result	RPD	Max RPD	Qualifiers
Lead, Dissolved	ug/L	ND	1.0U		20	

SAMPLE DUPLICATE: 432955

Parameter	Units	3067673002 Result	Dup Result	RPD	Max RPD	Qualifiers
Lead, Dissolved	ug/L	ND	1.3J		20	

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

QC Batch: MPRP/8168 Analysis Method: EPA 6010B

QC Batch Method: EPA 3050 Analysis Description: 6010 MET

Associated Lab Samples: 3067855007, 3067855008, 3067855009

METHOD BLANK: 432769 Matrix: Solid

Associated Lab Samples: 3067855007, 3067855008, 3067855009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	0.44J	0.50	04/24/12 11:02	

LABORATORY CONTROL SAMPLE: 432770

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	47.7	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 432772 432773

Parameter	Units	3067855007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	mg/kg	22.5	43.2	38	62.1	58.5	92	95	80-120	6	20	

SAMPLE DUPLICATE: 432771

Parameter	Units	3067855007 Result	Dup Result	RPD	Max RPD	Qualifiers
Lead	mg/kg	22.5	15.3	38	20	D6

QUALITY CONTROL DATA

Project: 911th T.Ramp
Pace Project No.: 3067855

QC Batch: MSV/12561 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035 Low
Associated Lab Samples: 3067855007, 3067855008, 3067855009

METHOD BLANK: 432740 Matrix: Solid

Associated Lab Samples: 3067855007, 3067855008, 3067855009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	mg/kg	0.0026U	0.0050	04/23/12 12:52	
1,1,2,2-Tetrachloroethane	mg/kg	0.00089U	0.0050	04/23/12 12:52	
1,1,2-Trichloroethane	mg/kg	0.00092U	0.0050	04/23/12 12:52	
1,1-Dichloroethane	mg/kg	0.00079U	0.0050	04/23/12 12:52	
1,1-Dichloroethene	mg/kg	0.00081U	0.0050	04/23/12 12:52	
1,2,4-Trichlorobenzene	mg/kg	0.0014U	0.0050	04/23/12 12:52	
1,2,4-Trimethylbenzene	mg/kg	0.0012U	0.0050	04/23/12 12:52	
1,2-Dibromoethane (EDB)	mg/kg	0.0026U	0.0050	04/23/12 12:52	
1,2-Dichlorobenzene	mg/kg	0.0011U	0.0050	04/23/12 12:52	
1,2-Dichloroethane	mg/kg	0.00091U	0.0050	04/23/12 12:52	
1,2-Dichloropropane	mg/kg	0.0016U	0.0050	04/23/12 12:52	
1,3,5-Trimethylbenzene	mg/kg	0.0014U	0.0050	04/23/12 12:52	
1,3-Dichlorobenzene	mg/kg	0.0013U	0.0050	04/23/12 12:52	
1,4-Dichlorobenzene	mg/kg	0.0012U	0.0050	04/23/12 12:52	
2-Butanone (MEK)	mg/kg	0.0013U	0.010	04/23/12 12:52	
2-Hexanone	mg/kg	0.0012U	0.010	04/23/12 12:52	
4-Methyl-2-pentanone (MIBK)	mg/kg	0.0010U	0.010	04/23/12 12:52	
Acetone	mg/kg	0.030	0.010	04/23/12 12:52	B,C6
Benzene	mg/kg	0.00078U	0.0050	04/23/12 12:52	
Bromochloromethane	mg/kg	0.00078U	0.0050	04/23/12 12:52	
Bromodichloromethane	mg/kg	0.0018U	0.0050	04/23/12 12:52	
Bromoform	mg/kg	0.0025U	0.0050	04/23/12 12:52	
Bromomethane	mg/kg	0.0029U	0.0050	04/23/12 12:52	
Carbon disulfide	mg/kg	0.00077U	0.0050	04/23/12 12:52	
Carbon tetrachloride	mg/kg	0.00089U	0.0050	04/23/12 12:52	
Chlorobenzene	mg/kg	0.00099U	0.0050	04/23/12 12:52	
Chloroethane	mg/kg	0.0016U	0.0050	04/23/12 12:52	
Chloroform	mg/kg	0.00071U	0.0050	04/23/12 12:52	
Chloromethane	mg/kg	0.0010U	0.0050	04/23/12 12:52	
cis-1,2-Dichloroethene	mg/kg	0.0025U	0.0050	04/23/12 12:52	
cis-1,3-Dichloropropene	mg/kg	0.0016U	0.0050	04/23/12 12:52	
Dibromochloromethane	mg/kg	0.0015U	0.0050	04/23/12 12:52	
Ethylbenzene	mg/kg	0.0026U	0.0050	04/23/12 12:52	
Isopropylbenzene (Cumene)	mg/kg	0.0011U	0.0050	04/23/12 12:52	
m&p-Xylene	mg/kg	0.0019U	0.010	04/23/12 12:52	
Methyl-tert-butyl ether	mg/kg	0.00071U	0.0050	04/23/12 12:52	
Methylene Chloride	mg/kg	0.0013U	0.0050	04/23/12 12:52	
Naphthalene	mg/kg	0.0025U	0.0050	04/23/12 12:52	
o-Xylene	mg/kg	0.0011U	0.0050	04/23/12 12:52	
Styrene	mg/kg	0.0011U	0.0050	04/23/12 12:52	
Tetrachloroethene	mg/kg	0.00073U	0.0050	04/23/12 12:52	
Toluene	mg/kg	0.00064U	0.0050	04/23/12 12:52	
TOTAL BTEX	mg/kg	0.0070U	0.030	04/23/12 12:52	

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

METHOD BLANK: 432740

Matrix: Solid

Associated Lab Samples: 3067855007, 3067855008, 3067855009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,2-Dichloroethene	mg/kg	0.00082U	0.0050	04/23/12 12:52	
trans-1,3-Dichloropropene	mg/kg	0.0016U	0.0050	04/23/12 12:52	
Trichloroethene	mg/kg	0.00076U	0.0050	04/23/12 12:52	
Vinyl chloride	mg/kg	0.00081U	0.0050	04/23/12 12:52	
Xylene (Total)	mg/kg	0.0031U	0.015	04/23/12 12:52	
1,2-Dichloroethane-d4 (S)	%	98	70-130	04/23/12 12:52	
4-Bromofluorobenzene (S)	%	100	70-130	04/23/12 12:52	
Toluene-d8 (S)	%	88	70-130	04/23/12 12:52	

LABORATORY CONTROL SAMPLE: 432741

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	.02	0.017	84	55-141	
1,1,2,2-Tetrachloroethane	mg/kg	.02	0.016	81	58-124	
1,1,2-Trichloroethane	mg/kg	.02	0.015	73	70-118	
1,1-Dichloroethane	mg/kg	.02	0.016	82	64-127	
1,1-Dichloroethene	mg/kg	.02	0.017	84	50-133	
1,2,4-Trichlorobenzene	mg/kg	.02	0.015	77	70-119	
1,2,4-Trimethylbenzene	mg/kg	.02	0.015	75	67-130	
1,2-Dibromoethane (EDB)	mg/kg	.02	0.016	78	67-117	
1,2-Dichlorobenzene	mg/kg	.02	0.015	74	67-122	
1,2-Dichloroethane	mg/kg	.02	0.016	78	54-132	
1,2-Dichloropropane	mg/kg	.02	0.017	83	68-112	
1,3,5-Trimethylbenzene	mg/kg	.02	0.015	77	65-132	
1,3-Dichlorobenzene	mg/kg	.02	0.015	74	65-127	
1,4-Dichlorobenzene	mg/kg	.02	0.015	76	66-127	
2-Butanone (MEK)	mg/kg	.02	0.023	117	54-135	
2-Hexanone	mg/kg	.02	0.017	84	58-148	
4-Methyl-2-pentanone (MIBK)	mg/kg	.02	0.017	86	55-142	
Acetone	mg/kg	.02	0.057	285	39-200	L0
Benzene	mg/kg	.02	0.017	85	65-130	
Bromochloromethane	mg/kg	.02	0.017	84	53-140	
Bromodichloromethane	mg/kg	.02	0.015	75	57-125	
Bromoform	mg/kg	.02	0.015	74	53-121	
Bromomethane	mg/kg	.02	0.016	78	30-167	
Carbon disulfide	mg/kg	.02	0.017	84	49-150	
Carbon tetrachloride	mg/kg	.02	0.016	78	47-146	
Chlorobenzene	mg/kg	.02	0.014	72	67-124	
Chloroethane	mg/kg	.02	0.016	78	34-170	
Chloroform	mg/kg	.02	0.016	80	63-128	
Chloromethane	mg/kg	.02	0.015	76	39-159	
cis-1,2-Dichloroethene	mg/kg	.02	0.015	77	64-126	
cis-1,3-Dichloropropene	mg/kg	.02	0.017	83	66-124	
Dibromochloromethane	mg/kg	.02	0.014	72	56-122	
Ethylbenzene	mg/kg	.02	0.016	78	65-131	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 34 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

LABORATORY CONTROL SAMPLE: 432741

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Isopropylbenzene (Cumene)	mg/kg	.02	0.017	85	64-137	
m&p-Xylene	mg/kg	.04	0.032	80	63-136	
Methyl-tert-butyl ether	mg/kg	.02	0.018	88	71-130	
Methylene Chloride	mg/kg	.02	0.016	80	45-136	
Naphthalene	mg/kg	.02	0.019	96	70-123	
o-Xylene	mg/kg	.02	0.015	77	68-129	
Styrene	mg/kg	.02	0.015	75	64-122	
Tetrachloroethene	mg/kg	.02	0.015	75	61-138	
Toluene	mg/kg	.02	0.015	77	63-132	
TOTAL BTEX	mg/kg		0.095			
trans-1,2-Dichloroethene	mg/kg	.02	0.016	82	60-130	
trans-1,3-Dichloropropene	mg/kg	.02	0.015	73	58-116	
Trichloroethene	mg/kg	.02	0.016	79	65-131	
Vinyl chloride	mg/kg	.02	0.016	82	49-149	
Xylene (Total)	mg/kg	.06	0.048	79	65-134	
1,2-Dichloroethane-d4 (S)	%			103	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			91	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 432742 432743

Parameter	Units	3067855007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	mg/kg	0.0024 U	.02	.018	0.021	0.017	107	97	55-141	24	30	
1,1,2,2-Tetrachloroethane	mg/kg	0.00082 U	.02	.018	0.020	0.015	98	83	58-124	30	30	
1,1,2-Trichloroethane	mg/kg	0.00085 U	.02	.018	0.018	0.014	89	79	70-118	25	30	
1,1-Dichloroethane	mg/kg	0.00073 U	.02	.018	0.020	0.016	101	94	64-127	21	30	
1,1-Dichloroethene	mg/kg	0.00075 U	.02	.018	0.021	0.017	104	98	50-133	20	30	
1,2,4-Trichlorobenzene	mg/kg	0.0013 U	.02	.018	0.0091	0.0062	46	35	70-119	38	30 M0,R1	
1,2,4-Trimethylbenzene	mg/kg	0.0011U	.02	.018	0.016	0.012	81	67	67-130	32	30 R1	
1,2-Dibromoethane (EDB)	mg/kg	0.0024 U	.02	.018	0.017	0.014	86	81	67-117	19	30	
1,2-Dichlorobenzene	mg/kg	0.0010 U	.02	.018	0.013	0.0095	64	55	67-122	30	30 M0	
1,2-Dichloroethane	mg/kg	0.00084 U	.02	.018	0.018	0.014	89	83	54-132	21	30	
1,2-Dichloropropane	mg/kg	0.0015 U	.02	.018	0.020	0.016	102	94	68-112	21	30	
1,3,5-Trimethylbenzene	mg/kg	0.0012 U	.02	.018	0.017	0.012	86	70	65-132	35	30 R1	
1,3-Dichlorobenzene	mg/kg	0.0012 U	.02	.018	0.013	0.0097	67	55	65-127	32	30 M0,R1	
1,4-Dichlorobenzene	mg/kg	0.0011U	.02	.018	0.013	0.0095	67	54	66-127	34	30 M0,R1	

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 432742 432743											
Parameter	Units	3067855007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
2-Butanone (MEK)	mg/kg	0.0012 U	.02	.018	0.035	0.028	175	163	54-135	21	30 M0
2-Hexanone	mg/kg	0.0011U	.02	.018	0.026	0.021	129	118	58-148	22	30
4-Methyl-2-pentanone (MIBK)	mg/kg	0.00095 U	.02	.018	0.029	0.024	143	135	55-142	19	30 M0
Acetone	mg/kg	0.036	.02	.018	0.059	0.055	114	108	39-200	7	30
Benzene	mg/kg	0.0023J	.02	.018	0.023	0.019	101	94	65-130	18	30
Bromochloromethane	mg/kg	0.00072 U	.02	.018	0.019	0.016	97	90	53-140	21	30
Bromodichloromethane	mg/kg	0.0017 U	.02	.018	0.017	0.014	87	80	57-125	22	30
Bromoform	mg/kg	0.0023 U	.02	.018	0.016	0.012	82	71	53-121	28	30
Bromomethane	mg/kg	0.0027 U	.02	.018	0.0084	0.0073	42	42	30-167	14	30
Carbon disulfide	mg/kg	0.0024J	.02	.018	0.024	0.021	110	105	49-150	16	30
Carbon tetrachloride	mg/kg	0.00082 U	.02	.018	0.022	0.017	112	97	47-146	27	30
Chlorobenzene	mg/kg	0.00091 U	.02	.018	0.016	0.012	80	71	67-124	25	30
Chloroethane	mg/kg	0.0015 U	.02	.018	0.021	0.016	104	91	34-170	26	30
Chloroform	mg/kg	0.00066 U	.02	.018	0.020	0.016	98	92	63-128	20	30
Chloromethane	mg/kg	0.00097 U	.02	.018	0.021	0.017	104	100	39-159	18	30
cis-1,2-Dichloroethene	mg/kg	0.0023 U	.02	.018	0.019	0.015	95	87	64-126	22	30
cis-1,3-Dichloropropene	mg/kg	0.0014 U	.02	.018	0.018	0.014	91	83	66-124	23	30
Dibromochloromethane	mg/kg	0.0014 U	.02	.018	0.016	0.013	79	72	56-122	22	30
Ethylbenzene	mg/kg	0.0024 U	.02	.018	0.018	0.014	89	79	65-131	26	30
Isopropylbenzene (Cumene)	mg/kg	0.00098 U	.02	.018	0.020	0.015	102	86	64-137	31	30 R1
m&p-Xylene	mg/kg	0.0018 U	.04	.035	0.036	0.027	90	78	63-136	27	30
Methyl-tert-butyl ether	mg/kg	0.00066 U	.02	.018	0.022	0.018	112	104	71-130	21	30
Methylene Chloride	mg/kg	0.0012 U	.02	.018	0.018	0.015	89	85	45-136	18	30
Naphthalene	mg/kg	0.0023 U	.02	.018	0.014	0.0098	63	48	70-123	35	30 M0,R1
o-Xylene	mg/kg	0.0010 U	.02	.018	0.017	0.013	86	76	68-129	26	30
Styrene	mg/kg	0.0010 U	.02	.018	0.015	0.011	76	65	64-122	30	30
Tetrachloroethene	mg/kg	0.00067 U	.02	.018	0.019	0.014	93	81	61-138	27	30
Toluene	mg/kg	0.00080 J	.02	.018	0.019	0.015	92	82	63-132	24	30
TOTAL BTEX	mg/kg	0.0065 U			0.11	0.088				24	30

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 432742 432743												
Parameter	Units	3067855007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
trans-1,2-Dichloroethene	mg/kg	0.00076 U	.02	.018	0.020	0.016	99	93	60-130	20	30	
trans-1,3-Dichloropropene	mg/kg	0.0015 U	.02	.018	0.015	0.012	76	68	58-116	24	30	
Trichloroethene	mg/kg	0.00070 U	.02	.018	0.020	0.016	98	90	65-131	23	30	
Vinyl chloride	mg/kg	0.00075 U	.02	.018	0.023	0.019	116	108	49-149	21	30	
Xylene (Total)	mg/kg	0.0028 U	.06	.053	0.053	0.041	88	78	65-134	26	30	
1,2-Dichloroethane-d4 (S)	%						99	104	70-130			
4-Bromofluorobenzene (S)	%						104	101	70-130			
Toluene-d8 (S)	%						89	90	70-130			

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

QC Batch: MSV/12550 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3067855001, 3067855002, 3067855003, 3067855005, 3067855006

METHOD BLANK: 432597 Matrix: Water
Associated Lab Samples: 3067855001, 3067855002, 3067855003, 3067855005, 3067855006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	0.19U	1.0	04/23/12 11:03	
1,1,2,2-Tetrachloroethane	ug/L	0.22U	1.0	04/23/12 11:03	
1,1,2-Trichloroethane	ug/L	0.23U	1.0	04/23/12 11:03	
1,1-Dichloroethane	ug/L	0.16U	1.0	04/23/12 11:03	
1,1-Dichloroethene	ug/L	0.14U	1.0	04/23/12 11:03	
1,2,4-Trichlorobenzene	ug/L	0.33U	1.0	04/23/12 11:03	
1,2,4-Trimethylbenzene	ug/L	0.13U	1.0	04/23/12 11:03	
1,2-Dichlorobenzene	ug/L	0.23U	1.0	04/23/12 11:03	
1,2-Dichloroethane	ug/L	0.14U	1.0	04/23/12 11:03	
1,2-Dichloropropane	ug/L	0.23U	1.0	04/23/12 11:03	
1,3,5-Trimethylbenzene	ug/L	0.12U	1.0	04/23/12 11:03	
1,3-Dichlorobenzene	ug/L	0.26U	1.0	04/23/12 11:03	
1,4-Dichlorobenzene	ug/L	0.17U	1.0	04/23/12 11:03	
2-Butanone (MEK)	ug/L	1.1U	10.0	04/23/12 11:03	
2-Hexanone	ug/L	0.34U	10.0	04/23/12 11:03	
4-Methyl-2-pentanone (MIBK)	ug/L	0.29U	10.0	04/23/12 11:03	
Acetone	ug/L	2.6U	10.0	04/23/12 11:03	
Benzene	ug/L	0.065U	1.0	04/23/12 11:03	
Bromochloromethane	ug/L	0.22U	1.0	04/23/12 11:03	
Bromodichloromethane	ug/L	0.15U	1.0	04/23/12 11:03	
Bromoform	ug/L	0.25U	1.0	04/23/12 11:03	
Bromomethane	ug/L	0.37U	1.0	04/23/12 11:03	
Carbon disulfide	ug/L	0.18U	1.0	04/23/12 11:03	
Carbon tetrachloride	ug/L	0.24U	1.0	04/23/12 11:03	
Chlorobenzene	ug/L	0.12U	1.0	04/23/12 11:03	
Chloroethane	ug/L	0.48U	1.0	04/23/12 11:03	
Chloroform	ug/L	0.16U	1.0	04/23/12 11:03	
Chloromethane	ug/L	0.21U	1.0	04/23/12 11:03	
cis-1,2-Dichloroethene	ug/L	0.20U	1.0	04/23/12 11:03	
cis-1,3-Dichloropropene	ug/L	0.19U	1.0	04/23/12 11:03	
Dibromochloromethane	ug/L	0.22U	1.0	04/23/12 11:03	
Ethylbenzene	ug/L	0.12U	1.0	04/23/12 11:03	
Isopropylbenzene (Cumene)	ug/L	0.12U	1.0	04/23/12 11:03	
m&p-Xylene	ug/L	0.21U	2.0	04/23/12 11:03	
Methyl-tert-butyl ether	ug/L	0.19U	1.0	04/23/12 11:03	
Methylene Chloride	ug/L	1.2	1.0	04/23/12 11:03	B,C9
Naphthalene	ug/L	0.33U	2.0	04/23/12 11:03	
o-Xylene	ug/L	0.10U	1.0	04/23/12 11:03	
Styrene	ug/L	0.18U	1.0	04/23/12 11:03	
Tetrachloroethene	ug/L	0.12U	1.0	04/23/12 11:03	
Toluene	ug/L	0.11U	1.0	04/23/12 11:03	
trans-1,2-Dichloroethene	ug/L	0.18U	1.0	04/23/12 11:03	
trans-1,3-Dichloropropene	ug/L	0.23U	1.0	04/23/12 11:03	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 38 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

METHOD BLANK: 432597

Matrix: Water

Associated Lab Samples: 3067855001, 3067855002, 3067855003, 3067855005, 3067855006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	0.15U	1.0	04/23/12 11:03	
Vinyl chloride	ug/L	0.13U	1.0	04/23/12 11:03	
Xylene (Total)	ug/L	0.31U	3.0	04/23/12 11:03	
1,2-Dichloroethane-d4 (S)	%	111	70-130	04/23/12 11:03	
4-Bromofluorobenzene (S)	%	105	70-130	04/23/12 11:03	
Toluene-d8 (S)	%	95	70-130	04/23/12 11:03	

LABORATORY CONTROL SAMPLE: 432598

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.5	97	64.3-127	
1,1,2,2-Tetrachloroethane	ug/L	20	17.9	89	64.6-121	
1,1,2-Trichloroethane	ug/L	20	17.4	87	75.6-120	
1,1-Dichloroethane	ug/L	20	18.3	92	68.5-122	
1,1-Dichloroethene	ug/L	20	17.4	87	57.1-120	
1,2,4-Trichlorobenzene	ug/L	20	19.0	95	67.6-129	
1,2,4-Trimethylbenzene	ug/L	20	17.8	89	68.9-125	
1,2-Dichlorobenzene	ug/L	20	17.8	89	69.6-120	
1,2-Dichloroethane	ug/L	20	18.0	90	60.5-133	
1,2-Dichloropropane	ug/L	20	16.8	84	71-120	
1,3,5-Trimethylbenzene	ug/L	20	17.9	89	67.3-129	
1,3-Dichlorobenzene	ug/L	20	17.7	88	68.4-121	
1,4-Dichlorobenzene	ug/L	20	17.8	89	68.5-123	
2-Butanone (MEK)	ug/L	20	21.5	107	55.7-138	
2-Hexanone	ug/L	20	20.5	102	67-133	
4-Methyl-2-pentanone (MIBK)	ug/L	20	18.7	93	64.5-121	
Acetone	ug/L	20	22.7	114	57.6-168	
Benzene	ug/L	20	17.4	87	69.8-120	
Bromochloromethane	ug/L	20	18.3	91	65.5-125	
Bromodichloromethane	ug/L	20	17.3	87	66.5-120	
Bromoform	ug/L	20	17.7	88	61.1-120	
Bromomethane	ug/L	20	39.7	198	10.6-200	
Carbon disulfide	ug/L	20	20.7	103	60.2-122	
Carbon tetrachloride	ug/L	20	18.6	93	60.1-127	
Chlorobenzene	ug/L	20	17.2	86	72-120	
Chloroethane	ug/L	20	18.4	92	36.8-142	
Chloroform	ug/L	20	18.5	92	69-122	
Chloromethane	ug/L	20	18.5	93	37.2-129	
cis-1,2-Dichloroethene	ug/L	20	18.5	92	69.5-123	
cis-1,3-Dichloropropene	ug/L	20	17.3	87	74.3-120	
Dibromochloromethane	ug/L	20	18.5	93	66.1-120	
Ethylbenzene	ug/L	20	17.1	86	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	19.4	97	68.3-129	
m&p-Xylene	ug/L	40	34.8	87	70.4-130	
Methyl-tert-butyl ether	ug/L	20	20.2	101	66.4-144	

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

LABORATORY CONTROL SAMPLE: 432598

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	20	19.2	96	61.5-125	
Naphthalene	ug/L	20	16.8	84	61-135	
o-Xylene	ug/L	20	17.0	85	70.6-127	
Styrene	ug/L	20	16.8	84	69.9-120	
Tetrachloroethene	ug/L	20	17.5	87	63.4-121	
Toluene	ug/L	20	17.4	87	71.5-120	
trans-1,2-Dichloroethene	ug/L	20	18.1	91	64.1-120	
trans-1,3-Dichloropropene	ug/L	20	16.7	84	71-120	
Trichloroethene	ug/L	20	16.7	84	65.9-120	
Vinyl chloride	ug/L	20	17.7	89	51-127	
Xylene (Total)	ug/L	60	51.8	86	70-129	
1,2-Dichloroethane-d4 (S)	%			95	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			93	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 432599 432600

Parameter	Units	3067866004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	23.0	22.5	115	112	64.3-127	2	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.9	18.2	94	91	64.6-121	3	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.2	18.1	96	90	75.6-120	6	30	
1,1-Dichloroethane	ug/L	ND	20	20	21.2	20.7	106	103	68.5-122	3	30	
1,1-Dichloroethene	ug/L	ND	20	20	21.4	20.5	107	103	57.1-120	4	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	18.3	17.4	91	87	67.6-129	5	30	
1,2,4-Trimethylbenzene	ug/L	ND	20	20	19.6	18.9	98	94	68.9-125	4	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	18.9	18.1	95	91	69.6-120	4	30	
1,2-Dichloroethane	ug/L	ND	20	20	20.6	19.8	103	99	60.5-133	4	30	
1,2-Dichloropropane	ug/L	ND	20	20	18.9	18.3	95	92	71-120	3	30	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	19.3	18.8	96	94	67.3-129	3	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	18.6	18.2	93	91	68.4-121	2	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	19.0	18.6	95	93	68.5-123	2	30	
2-Butanone (MEK)	ug/L	ND	20	20	24.2	20.9	121	104	55.7-138	15	30	
2-Hexanone	ug/L	ND	20	20	22.1	20.7	110	103	67-133	7	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	20.1	18.4	100	92	64.5-121	8	30	
Acetone	ug/L	ND	20	20	18.2	14.9	91	74	57.6-168	20	30	
Benzene	ug/L	ND	20	20	19.3	19.1	97	96	69.8-120	1	30	
Bromochloromethane	ug/L	ND	20	20	21.1	20.8	106	104	65.5-125	2	30	
Bromodichloromethane	ug/L	ND	20	20	18.5	18.1	92	90	66.5-120	2	30	
Bromoform	ug/L	ND	20	20	18.0	17.3	90	87	61.1-120	4	30	
Bromomethane	ug/L	ND	20	20	24.0	25.8	120	129	10.6-200	7	30	
Carbon disulfide	ug/L	ND	20	20	22.1	20.9	110	105	60.2-122	5	30	
Carbon tetrachloride	ug/L	ND	20	20	21.7	21.3	108	107	60.1-127	2	30	
Chlorobenzene	ug/L	ND	20	20	19.1	18.9	95	95	72-120	.8	30	
Chloroethane	ug/L	ND	20	20	25.4	24.9	127	125	36.8-142	2	30	
Chloroform	ug/L	ND	20	20	20.7	20.4	104	102	69-122	2	30	
Chloromethane	ug/L	ND	20	20	20.9	20.5	104	102	37.2-129	2	30	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 40 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 432599 432600											
Parameter	Units	3067866004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
cis-1,2-Dichloroethene	ug/L	ND	20	20	21.0	20.4	105	102	69.5-123	3	30
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.3	17.8	92	89	74.3-120	3	30
Dibromochloromethane	ug/L	ND	20	20	19.5	18.5	97	93	66.1-120	5	30
Ethylbenzene	ug/L	ND	20	20	19.8	19.0	99	95	70.9-124	4	30
Isopropylbenzene (Cumene)	ug/L	ND	20	20	21.8	21.0	109	105	68.3-129	4	30
m&p-Xylene	ug/L	ND	40	40	38.8	38.0	97	95	70.4-130	2	30
Methyl-tert-butyl ether	ug/L	ND	20	20	22.8	21.1	114	106	66.4-144	8	30
Methylene Chloride	ug/L	ND	20	20	21.0	20.6	105	103	61.5-125	2	30
Naphthalene	ug/L	ND	20	20	14.8	14.7	74	73	61-135	.7	30
o-Xylene	ug/L	ND	20	20	19.2	18.7	96	94	70.6-127	2	30
Styrene	ug/L	ND	20	20	17.8	17.2	89	86	69.9-120	3	30
Tetrachloroethene	ug/L	ND	20	20	19.3	18.9	97	94	63.4-121	2	30
Toluene	ug/L	ND	20	20	19.5	19.0	97	95	71.5-120	2	30
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.7	20.8	108	104	64.1-120	4	30
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.0	17.3	90	86	71-120	4	30
Trichloroethene	ug/L	ND	20	20	18.9	18.3	95	91	65.9-120	4	30
Vinyl chloride	ug/L	ND	20	20	22.9	21.6	114	108	51-127	6	30
Xylene (Total)	ug/L	ND	60	60	58.0	56.8	97	95	70-129	2	30
1,2-Dichloroethane-d4 (S)	%						96	96	70-130		
4-Bromofluorobenzene (S)	%						101	102	70-130		
Toluene-d8 (S)	%						92	94	70-130		

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

QC Batch: MSV/12566

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV

Associated Lab Samples: 3067855004

METHOD BLANK: 433104

Matrix: Water

Associated Lab Samples: 3067855004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	0.19U	1.0	04/25/12 12:47	
1,1,2,2-Tetrachloroethane	ug/L	0.22U	1.0	04/25/12 12:47	
1,1,2-Trichloroethane	ug/L	0.23U	1.0	04/25/12 12:47	
1,1-Dichloroethane	ug/L	0.16U	1.0	04/25/12 12:47	
1,1-Dichloroethene	ug/L	0.14U	1.0	04/25/12 12:47	
1,2,4-Trichlorobenzene	ug/L	0.33U	1.0	04/25/12 12:47	
1,2,4-Trimethylbenzene	ug/L	0.13U	1.0	04/25/12 12:47	
1,2-Dichlorobenzene	ug/L	0.23U	1.0	04/25/12 12:47	
1,2-Dichloroethane	ug/L	0.14U	1.0	04/25/12 12:47	
1,2-Dichloropropane	ug/L	0.23U	1.0	04/25/12 12:47	
1,3,5-Trimethylbenzene	ug/L	0.12U	1.0	04/25/12 12:47	
1,3-Dichlorobenzene	ug/L	0.26U	1.0	04/25/12 12:47	
1,4-Dichlorobenzene	ug/L	0.17U	1.0	04/25/12 12:47	
2-Butanone (MEK)	ug/L	1.1U	10.0	04/25/12 12:47	
2-Hexanone	ug/L	0.34U	10.0	04/25/12 12:47	
4-Methyl-2-pentanone (MIBK)	ug/L	0.29U	10.0	04/25/12 12:47	
Acetone	ug/L	2.6U	10.0	04/25/12 12:47	
Benzene	ug/L	0.065U	1.0	04/25/12 12:47	
Bromochloromethane	ug/L	0.22U	1.0	04/25/12 12:47	
Bromodichloromethane	ug/L	0.15U	1.0	04/25/12 12:47	
Bromoform	ug/L	0.25U	1.0	04/25/12 12:47	
Bromomethane	ug/L	0.37U	1.0	04/25/12 12:47	
Carbon disulfide	ug/L	0.18U	1.0	04/25/12 12:47	
Carbon tetrachloride	ug/L	0.24U	1.0	04/25/12 12:47	
Chlorobenzene	ug/L	0.12U	1.0	04/25/12 12:47	
Chloroethane	ug/L	0.48U	1.0	04/25/12 12:47	
Chloroform	ug/L	0.16U	1.0	04/25/12 12:47	
Chloromethane	ug/L	0.21U	1.0	04/25/12 12:47	
cis-1,2-Dichloroethene	ug/L	0.20U	1.0	04/25/12 12:47	
cis-1,3-Dichloropropene	ug/L	0.19U	1.0	04/25/12 12:47	
Dibromochloromethane	ug/L	0.22U	1.0	04/25/12 12:47	
Ethylbenzene	ug/L	0.12U	1.0	04/25/12 12:47	
Isopropylbenzene (Cumene)	ug/L	0.12U	1.0	04/25/12 12:47	
m&p-Xylene	ug/L	0.21U	2.0	04/25/12 12:47	
Methyl-tert-butyl ether	ug/L	0.19U	1.0	04/25/12 12:47	
Methylene Chloride	ug/L	1.2	1.0	04/25/12 12:47	B,C9
Naphthalene	ug/L	0.33U	2.0	04/25/12 12:47	
o-Xylene	ug/L	0.10U	1.0	04/25/12 12:47	
Styrene	ug/L	0.18U	1.0	04/25/12 12:47	
Tetrachloroethene	ug/L	0.12U	1.0	04/25/12 12:47	
Toluene	ug/L	0.11U	1.0	04/25/12 12:47	
trans-1,2-Dichloroethene	ug/L	0.18U	1.0	04/25/12 12:47	
trans-1,3-Dichloropropene	ug/L	0.23U	1.0	04/25/12 12:47	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 42 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

METHOD BLANK: 433104

Matrix: Water

Associated Lab Samples: 3067855004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	0.15U	1.0	04/25/12 12:47	
Vinyl chloride	ug/L	0.13U	1.0	04/25/12 12:47	
Xylene (Total)	ug/L	0.31U	3.0	04/25/12 12:47	
1,2-Dichloroethane-d4 (S)	%	111	70-130	04/25/12 12:47	
4-Bromofluorobenzene (S)	%	101	70-130	04/25/12 12:47	
Toluene-d8 (S)	%	93	70-130	04/25/12 12:47	

LABORATORY CONTROL SAMPLE: 433105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.7	94	64.3-127	
1,1,2,2-Tetrachloroethane	ug/L	20	16.5	83	64.6-121	
1,1,2-Trichloroethane	ug/L	20	16.4	82	75.6-120	
1,1-Dichloroethane	ug/L	20	17.8	89	68.5-122	
1,1-Dichloroethene	ug/L	20	16.9	84	57.1-120	
1,2,4-Trichlorobenzene	ug/L	20	17.2	86	67.6-129	
1,2,4-Trimethylbenzene	ug/L	20	16.7	84	68.9-125	
1,2-Dichlorobenzene	ug/L	20	16.6	83	69.6-120	
1,2-Dichloroethane	ug/L	20	17.6	88	60.5-133	
1,2-Dichloropropane	ug/L	20	15.7	78	71-120	
1,3,5-Trimethylbenzene	ug/L	20	16.6	83	67.3-129	
1,3-Dichlorobenzene	ug/L	20	16.2	81	68.4-121	
1,4-Dichlorobenzene	ug/L	20	16.7	83	68.5-123	
2-Butanone (MEK)	ug/L	20	23.0	115	55.7-138	
2-Hexanone	ug/L	20	21.4	107	67-133	
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.0	95	64.5-121	
Acetone	ug/L	20	24.7	123	57.6-168	
Benzene	ug/L	20	16.2	81	69.8-120	
Bromochloromethane	ug/L	20	17.7	88	65.5-125	
Bromodichloromethane	ug/L	20	15.2	76	66.5-120	
Bromoform	ug/L	20	15.8	79	61.1-120	
Bromomethane	ug/L	20	32.6	163	10.6-200	
Carbon disulfide	ug/L	20	20.5	103	60.2-122	
Carbon tetrachloride	ug/L	20	17.6	88	60.1-127	
Chlorobenzene	ug/L	20	16.0	80	72-120	
Chloroethane	ug/L	20	18.6	93	36.8-142	
Chloroform	ug/L	20	17.9	89	69-122	
Chloromethane	ug/L	20	16.9	85	37.2-129	
cis-1,2-Dichloroethene	ug/L	20	17.4	87	69.5-123	
cis-1,3-Dichloropropene	ug/L	20	15.7	78	74.3-120	
Dibromochloromethane	ug/L	20	17.0	85	66.1-120	
Ethylbenzene	ug/L	20	16.3	82	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	17.7	88	68.3-129	
m&p-Xylene	ug/L	40	33.0	82	70.4-130	
Methyl-tert-butyl ether	ug/L	20	21.4	107	66.4-144	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 43 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

LABORATORY CONTROL SAMPLE: 433105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	20	19.3	96	61.5-125	
Naphthalene	ug/L	20	15.3	76	61-135	
o-Xylene	ug/L	20	15.9	79	70.6-127	
Styrene	ug/L	20	15.9	79	69.9-120	
Tetrachloroethene	ug/L	20	16.2	81	63.4-121	
Toluene	ug/L	20	16.0	80	71.5-120	
trans-1,2-Dichloroethene	ug/L	20	17.4	87	64.1-120	
trans-1,3-Dichloropropene	ug/L	20	16.1	80	71-120	
Trichloroethene	ug/L	20	15.8	79	65.9-120	
Vinyl chloride	ug/L	20	17.4	87	51-127	
Xylene (Total)	ug/L	60	48.9	81	70-129	
1,2-Dichloroethane-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			93	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 433106

433107

Parameter	Units	3067783004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	20.4	19.8	102	99	64.3-127	3	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	16.2	15.8	81	79	64.6-121	2	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.0	16.1	85	80	75.6-120	6	30	
1,1-Dichloroethane	ug/L	ND	20	20	19.9	18.8	99	94	68.5-122	5	30	
1,1-Dichloroethene	ug/L	ND	20	20	19.9	19.3	99	96	57.1-120	3	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	14.1	14.2	71	71	67.6-129	.7	30	
1,2,4-Trimethylbenzene	ug/L	ND	20	20	16.9	16.3	84	82	68.9-125	4	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	16.3	16.1	81	81	69.6-120	1	30	
1,2-Dichloroethane	ug/L	ND	20	20	19.0	18.0	95	90	60.5-133	5	30	
1,2-Dichloropropane	ug/L	ND	20	20	17.8	16.6	89	83	71-120	7	30	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	16.9	16.6	85	83	67.3-129	2	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	16.8	16.5	84	82	68.4-121	2	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	16.3	15.8	81	79	68.5-123	3	30	
2-Butanone (MEK)	ug/L	ND	20	20	19.9	20.6	99	103	55.7-138	3	30	
2-Hexanone	ug/L	ND	20	20	19.7	20.2	98	101	67-133	3	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	17.9	18.2	89	91	64.5-121	2	30	
Acetone	ug/L	ND	20	20	10.9	14.1	55	70	57.6-168	25	30	M0
Benzene	ug/L	ND	20	20	18.0	17.1	90	85	69.8-120	5	30	
Bromochloromethane	ug/L	ND	20	20	18.7	18.3	94	92	65.5-125	2	30	
Bromodichloromethane	ug/L	ND	20	20	15.7	15.2	79	76	66.5-120	3	30	
Bromoform	ug/L	ND	20	20	13.6	14.0	68	70	61.1-120	3	30	
Bromomethane	ug/L	ND	20	20	23.5	24.1	118	121	10.6-200	2	30	
Carbon disulfide	ug/L	ND	20	20	15.1	15.0	75	75	60.2-122	.8	30	
Carbon tetrachloride	ug/L	ND	20	20	18.2	17.8	91	89	60.1-127	2	30	
Chlorobenzene	ug/L	ND	20	20	17.3	16.5	86	83	72-120	4	30	
Chloroethane	ug/L	ND	20	20	19.2	19.3	96	96	36.8-142	.3	30	
Chloroform	ug/L	ND	20	20	19.2	18.4	96	92	69-122	4	30	
Chloromethane	ug/L	ND	20	20	19.9	19.6	99	98	37.2-129	1	30	

Date: 05/03/2012 10:10 AM

REPORT OF LABORATORY ANALYSIS

Page 44 of 48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 433106 433107											
Parameter	Units	3067783004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
cis-1,2-Dichloroethene	ug/L	ND	20	20	19.7	18.6	99	93	69.5-123	6	30
cis-1,3-Dichloropropene	ug/L	ND	20	20	16.0	15.8	80	79	74.3-120	1	30
Dibromochloromethane	ug/L	ND	20	20	16.7	16.2	84	81	66.1-120	3	30
Ethylbenzene	ug/L	ND	20	20	17.7	17.4	89	87	70.9-124	2	30
Isopropylbenzene (Cumene)	ug/L	ND	20	20	19.4	18.5	97	93	68.3-129	4	30
m&p-Xylene	ug/L	ND	40	40	35.3	34.3	88	86	70.4-130	3	30
Methyl-tert-butyl ether	ug/L	ND	20	20	19.5	19.6	97	98	66.4-144	.8	30
Methylene Chloride	ug/L	ND	20	20	19.4	18.7	97	94	61.5-125	4	30
Naphthalene	ug/L	ND	20	20	12.8	13.2	64	66	61-135	3	30
o-Xylene	ug/L	ND	20	20	17.5	17.2	87	86	70.6-127	2	30
Styrene	ug/L	ND	20	20	16.8	16.2	84	81	69.9-120	4	30
Tetrachloroethene	ug/L	ND	20	20	17.6	16.8	88	84	63.4-121	5	30
Toluene	ug/L	ND	20	20	18.1	17.2	90	86	71.5-120	5	30
trans-1,2-Dichloroethene	ug/L	ND	20	20	19.9	19.0	100	95	64.1-120	5	30
trans-1,3-Dichloropropene	ug/L	ND	20	20	15.9	15.5	79	77	71-120	3	30
Trichloroethene	ug/L	ND	20	20	17.4	16.6	87	83	65.9-120	5	30
Vinyl chloride	ug/L	ND	20	20	19.5	19.4	97	97	51-127	.3	30
Xylene (Total)	ug/L	ND	60	60	52.8	51.5	88	86	70-129	3	30
1,2-Dichloroethane-d4 (S)	%						94	93	70-130		
4-Bromofluorobenzene (S)	%						99	100	70-130		
Toluene-d8 (S)	%						94	93	70-130		

QUALITY CONTROL DATA

Project: 911th T.Ramp

Pace Project No.: 3067855

QC Batch:	PMST/3130	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	3067855007, 3067855008, 3067855009		

SAMPLE DUPLICATE: 433846

Parameter	Units	3068152001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	16.4	16.7	2	20	

SAMPLE DUPLICATE: 433847

Parameter	Units	3068152008 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	18.6	18.2	2	20	

QUALIFIERS

Project: 911th T.Ramp

Pace Project No.: 3067855

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

- | | |
|----|---|
| B | Analyte was detected in the associated method blank. |
| C6 | Analyte is a common laboratory contaminant (confirmed by presence in method blank). |
| C9 | Common Laboratory Contaminant. |
| D6 | The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits. |
| L0 | Analyte recovery in the laboratory control sample (LCS) was outside QC limits. |
| M0 | Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. |
| R1 | RPD value was outside control limits. |

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 911th T.Ramp

Pace Project No.: 3067855

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3067855001	Tramp-F11-W	EPA 8011	GCSV/4361	EPA 8011	GCSV/4362
3067855002	Tramp-L2-W	EPA 8011	GCSV/4361	EPA 8011	GCSV/4362
3067855003	Duplicate	EPA 8011	GCSV/4361	EPA 8011	GCSV/4362
3067855004	Field Blank	EPA 8011	GCSV/4361	EPA 8011	GCSV/4362
3067855005	Equipment Blank	EPA 8011	GCSV/4361	EPA 8011	GCSV/4362
3067855001	Tramp-F11-W	EPA 200.7	MPRP/8169	EPA 200.7	ICP/7613
3067855002	Tramp-L2-W	EPA 200.7	MPRP/8169	EPA 200.7	ICP/7613
3067855003	Duplicate	EPA 200.7	MPRP/8169	EPA 200.7	ICP/7613
3067855004	Field Blank	EPA 200.7	MPRP/8169	EPA 200.7	ICP/7613
3067855005	Equipment Blank	EPA 200.7	MPRP/8169	EPA 200.7	ICP/7613
3067855007	Tramp-I4-S-2-4	EPA 3050	MPRP/8168	EPA 6010B	ICP/7612
3067855008	Tramp-I4-MS	EPA 3050	MPRP/8168	EPA 6010B	ICP/7612
3067855009	Tramp-I4-MSD	EPA 3050	MPRP/8168	EPA 6010B	ICP/7612
3067855007	Tramp-I4-S-2-4	EPA 8260	MSV/12561		
3067855008	Tramp-I4-MS	EPA 8260	MSV/12561		
3067855009	Tramp-I4-MSD	EPA 8260	MSV/12561		
3067855001	Tramp-F11-W	EPA 8260	MSV/12550		
3067855002	Tramp-L2-W	EPA 8260	MSV/12550		
3067855003	Duplicate	EPA 8260	MSV/12550		
3067855004	Field Blank	EPA 8260	MSV/12566		
3067855005	Equipment Blank	EPA 8260	MSV/12550		
3067855006	Trip Blank	EPA 8260	MSV/12550		
3067855007	Tramp-I4-S-2-4	ASTM D2974-87	PMST/3130		
3067855008	Tramp-I4-MS	ASTM D2974-87	PMST/3130		
3067855009	Tramp-I4-MSD	ASTM D2974-87	PMST/3130		

May 14, 2012

Jason McCabe
Rhea Engineers & Consultants, Inc.
4975 William Flynn Highway
Suite 14
Gibsonia, PA 15044

RE: Project: 54904B
Pace Project No.: 3068551

Dear Jason McCabe:

Enclosed are the analytical results for sample(s) received by the laboratory on April 27, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Timothy Reed

timothy.reed@pacelabs.com
Project Manager

Enclosures

cc: Erica DeLattre, Rhea Engineers & Consultants, Inc.
Dan DePra, CDM Smith



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

CERTIFICATIONS

Project: 54904B
Pace Project No.: 3068551

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601
ACCLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH 0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/TNI Certification #: LA080002
Louisiana/TNI Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Virginia VELAP (Cert # 460198)
Washington Certification #: C868
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

Page 2 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE SUMMARY

Project: 54904B

Pace Project No.: 3068551

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3068551001	TRAMP-C10-S-2-4	Solid	04/24/12 11:15	04/27/12 17:55
3068551002	TRAMP-C3-S-2-4	Solid	04/25/12 09:24	04/27/12 17:55
3068551003	TRAMP-A9-S-2-4	Solid	04/25/12 13:15	04/27/12 17:55
3068551004	TRAMP-H0-W	Water	04/24/12 10:25	04/27/12 17:55
3068551005	TRAMP-I4-W	Water	04/24/12 12:25	04/27/12 17:55
3068551006	TRAMP-Trip	Water	04/24/12 00:01	04/27/12 17:55
3068551007	TRAMP-C10-W	Water	04/25/12 12:10	04/27/12 17:55
3068551008	TRAMP-D7-W	Water	04/25/12 09:55	04/27/12 17:55
3068551009	TRAMP-A9-W	Water	04/26/12 14:25	04/27/12 17:55
3068551010	TRAMP-C3-W	Water	04/26/12 10:35	04/27/12 17:55
3068551011	TRAMP-EB-0426	Water	04/26/12 11:00	04/27/12 17:55

REPORT OF LABORATORY ANALYSIS

Page 3 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE ANALYTE COUNT

Project: 54904B
Pace Project No.: 3068551

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3068551001	TRAMP-C10-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3068551002	TRAMP-C3-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3068551003	TRAMP-A9-S-2-4	EPA 6010B	CTS	1
		EPA 8260	JEW	50
		ASTM D2974-87	AJC	1
3068551004	TRAMP-H0-W	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50
3068551005	TRAMP-I4-W	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50
3068551006	TRAMP-Trip	EPA 8260	JAS	50
3068551007	TRAMP-C10-W	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50
3068551008	TRAMP-D7-W	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50
3068551009	TRAMP-A9-W	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50
3068551010	TRAMP-C3-W	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50
3068551011	TRAMP-EB-0426	EPA 8011	CWB	1
		EPA 200.7	CTS	1
		EPA 8260	JAS	50

REPORT OF LABORATORY ANALYSIS

Page 4 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 54904B
Pace Project No.: 3068551

Method: EPA 8011
Description: 8011 GCS EDB and DBCP
Client: CDM Smith
Date: May 14, 2012

General Information:

7 samples were analyzed for EPA 8011. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 54904B
Pace Project No.: 3068551

Method: EPA 200.7
Description: 200.7 Metals, Dissolved
Client: CDM Smith
Date: May 14, 2012

General Information:

7 samples were analyzed for EPA 200.7. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 6 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 54904B
Pace Project No.: 3068551

Method: EPA 6010B
Description: 6010 MET ICP
Client: CDM Smith
Date: May 14, 2012

General Information:

3 samples were analyzed for EPA 6010B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 54904B
Pace Project No.: 3068551

Method: EPA 8260
Description: 8260 MSV 5030 Low Level
Client: CDM Smith
Date: May 14, 2012

General Information:

3 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

QC Batch: MSV/12614

B: Analyte was detected in the associated method blank.

- BLANK (Lab ID: 436800)
- Acetone

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/12614

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 436801)
 - 1,1,2-Trichloroethane
 - 1,2-Dibromoethane (EDB)
 - Naphthalene

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 436801)
 - Chloromethane

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/12614

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 54904B

Pace Project No.: 3068551

Method: EPA 8260

Description: 8260 MSV 5030 Low Level

Client: CDM Smith

Date: May 14, 2012

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: MSV/12614

C9: Common Laboratory Contaminant.

- BLANK (Lab ID: 436800)
- Acetone

REPORT OF LABORATORY ANALYSIS

Page 9 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: 54904B
Pace Project No.: 3068551

Method: EPA 8260
Description: 8260 MSV
Client: CDM Smith
Date: May 14, 2012

General Information:

8 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

QC Batch: MSV/12641

B: Analyte was detected in the associated method blank.

- BLANK (Lab ID: 437729)
- Methylene Chloride

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/12641

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 437730)
- Bromomethane

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/12641

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 3068626001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 437731)
- 2-Hexanone
- Bromomethane
- Chloroethane

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 54904B
Pace Project No.: 3068551

Method: EPA 8260
Description: 8260 MSV
Client: CDM Smith
Date: May 14, 2012

QC Batch: MSV/12641

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 3068626001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- Chloromethane
- Vinyl chloride
- MSD (Lab ID: 437732)
 - 2-Hexanone
 - Bromomethane
 - Chloroethane
 - Chloromethane
 - Vinyl chloride

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: MSV/12641

C9: Common Laboratory Contaminant.

- BLANK (Lab ID: 437729)
- Methylene Chloride

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 11 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-C10-S-2-4 **Lab ID: 3068551001** Collected: 04/24/12 11:15 Received: 04/27/12 17:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	16.7	mg/kg	0.29	0.25	1	05/02/12 11:45	05/03/12 09:04	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.0015U	mg/kg	0.0079	0.0015	1		05/02/12 18:11	67-64-1	
Benzene	0.0034J	mg/kg	0.0039	0.00061	1		05/02/12 18:11	71-43-2	
Bromodichloromethane	0.0014U	mg/kg	0.0039	0.0014	1		05/02/12 18:11	75-27-4	
Bromoform	0.0020U	mg/kg	0.0039	0.0020	1		05/02/12 18:11	75-25-2	
Bromomethane	0.0023U	mg/kg	0.0039	0.0023	1		05/02/12 18:11	74-83-9	
TOTAL BTEX	0.0055U	mg/kg	0.024	0.0055	1		05/02/12 18:11		
2-Butanone (MEK)	0.00099U	mg/kg	0.0079	0.00099	1		05/02/12 18:11	78-93-3	
Carbon disulfide	0.00060U	mg/kg	0.0039	0.00060	1		05/02/12 18:11	75-15-0	
Carbon tetrachloride	0.00070U	mg/kg	0.0039	0.00070	1		05/02/12 18:11	56-23-5	
Chlorobenzene	0.00078U	mg/kg	0.0039	0.00078	1		05/02/12 18:11	108-90-7	
Chloroethane	0.0013U	mg/kg	0.0039	0.0013	1		05/02/12 18:11	75-00-3	
Chloroform	0.00056U	mg/kg	0.0039	0.00056	1		05/02/12 18:11	67-66-3	
Chloromethane	0.00083U	mg/kg	0.0039	0.00083	1		05/02/12 18:11	74-87-3	
Dibromochloromethane	0.0012U	mg/kg	0.0039	0.0012	1		05/02/12 18:11	124-48-1	
1,2-Dibromoethane (EDB)	0.0021U	mg/kg	0.0039	0.0021	1		05/02/12 18:11	106-93-4	
1,2-Dichlorobenzene	0.00086U	mg/kg	0.0039	0.00086	1		05/02/12 18:11	95-50-1	
1,3-Dichlorobenzene	0.0010U	mg/kg	0.0039	0.0010	1		05/02/12 18:11	541-73-1	
1,4-Dichlorobenzene	0.00096U	mg/kg	0.0039	0.00096	1		05/02/12 18:11	106-46-7	
1,1-Dichloroethane	0.00062U	mg/kg	0.0039	0.00062	1		05/02/12 18:11	75-34-3	
1,2-Dichloroethane	0.00072U	mg/kg	0.0039	0.00072	1		05/02/12 18:11	107-06-2	
1,2-Dichloroethene (Total)	0.0026U	mg/kg	0.0079	0.0026	1		05/02/12 18:11	540-59-0	
1,1-Dichloroethene	0.00064U	mg/kg	0.0039	0.00064	1		05/02/12 18:11	75-35-4	
cis-1,2-Dichloroethene	0.0019U	mg/kg	0.0039	0.0019	1		05/02/12 18:11	156-59-2	
trans-1,2-Dichloroethene	0.00064U	mg/kg	0.0039	0.00064	1		05/02/12 18:11	156-60-5	
1,2-Dichloropropane	0.0013U	mg/kg	0.0039	0.0013	1		05/02/12 18:11	78-87-5	
cis-1,3-Dichloropropene	0.0012U	mg/kg	0.0039	0.0012	1		05/02/12 18:11	10061-01-5	
trans-1,3-Dichloropropene	0.0013U	mg/kg	0.0039	0.0013	1		05/02/12 18:11	10061-02-6	
Ethylbenzene	0.0020U	mg/kg	0.0039	0.0020	1		05/02/12 18:11	100-41-4	
2-Hexanone	0.00093U	mg/kg	0.0079	0.00093	1		05/02/12 18:11	591-78-6	
Isopropylbenzene (Cumene)	0.00083U	mg/kg	0.0039	0.00083	1		05/02/12 18:11	98-82-8	
Methylene Chloride	0.0011U	mg/kg	0.0039	0.0011	1		05/02/12 18:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.00081U	mg/kg	0.0079	0.00081	1		05/02/12 18:11	108-10-1	
Methyl-tert-butyl ether	0.00056U	mg/kg	0.0039	0.00056	1		05/02/12 18:11	1634-04-4	
Naphthalene	0.0020U	mg/kg	0.0039	0.0020	1		05/02/12 18:11	91-20-3	
Styrene	0.00087U	mg/kg	0.0039	0.00087	1		05/02/12 18:11	100-42-5	
1,1,2,2-Tetrachloroethane	0.00070U	mg/kg	0.0039	0.00070	1		05/02/12 18:11	79-34-5	
Tetrachloroethene	0.00057U	mg/kg	0.0039	0.00057	1		05/02/12 18:11	127-18-4	
Toluene	0.0011J	mg/kg	0.0039	0.00051	1		05/02/12 18:11	108-88-3	
1,1,1-Trichloroethane	0.0020U	mg/kg	0.0039	0.0020	1		05/02/12 18:11	71-55-6	
1,1,2-Trichloroethane	0.00072U	mg/kg	0.0039	0.00072	1		05/02/12 18:11	79-00-5	
Trichloroethene	0.00059U	mg/kg	0.0039	0.00059	1		05/02/12 18:11	79-01-6	
1,2,4-Trimethylbenzene	0.00091U	mg/kg	0.0039	0.00091	1		05/02/12 18:11	95-63-6	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 12 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-C10-S-2-4 **Lab ID: 3068551001** Collected: 04/24/12 11:15 Received: 04/27/12 17:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0011U	mg/kg	0.0039	0.0011	1		05/02/12 18:11	108-67-8	
Vinyl chloride	0.00064U	mg/kg	0.0039	0.00064	1		05/02/12 18:11	75-01-4	
Xylene (Total)	0.0024U	mg/kg	0.012	0.0024	1		05/02/12 18:11	1330-20-7	
m&p-Xylene	0.0015U	mg/kg	0.0079	0.0015	1		05/02/12 18:11	179601-23-1	
o-Xylene	0.00089U	mg/kg	0.0039	0.00089	1		05/02/12 18:11	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	70-130		1		05/02/12 18:11	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		05/02/12 18:11	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	70-130		1		05/02/12 18:11	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	11.6	%	0.10	0.10	1		05/03/12 16:24		

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-C3-S-2-4 **Lab ID: 3068551002** Collected: 04/25/12 09:24 Received: 04/27/12 17:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	13.4	mg/kg	0.43	0.36	1	05/02/12 11:45	05/03/12 09:15	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.0022U	mg/kg	0.011	0.0022	1		05/02/12 18:34	67-64-1	
Benzene	0.0064	mg/kg	0.0057	0.00088	1		05/02/12 18:34	71-43-2	
Bromodichloromethane	0.0021U	mg/kg	0.0057	0.0021	1		05/02/12 18:34	75-27-4	
Bromoform	0.0029U	mg/kg	0.0057	0.0029	1		05/02/12 18:34	75-25-2	
Bromomethane	0.0033U	mg/kg	0.0057	0.0033	1		05/02/12 18:34	74-83-9	
TOTAL BTEX	0.0080U	mg/kg	0.034	0.0080	1		05/02/12 18:34		
2-Butanone (MEK)	0.0014U	mg/kg	0.011	0.0014	1		05/02/12 18:34	78-93-3	
Carbon disulfide	0.0018J	mg/kg	0.0057	0.00087	1		05/02/12 18:34	75-15-0	
Carbon tetrachloride	0.0010U	mg/kg	0.0057	0.0010	1		05/02/12 18:34	56-23-5	
Chlorobenzene	0.0011U	mg/kg	0.0057	0.0011	1		05/02/12 18:34	108-90-7	
Chloroethane	0.013	mg/kg	0.0057	0.0018	1		05/02/12 18:34	75-00-3	
Chloroform	0.00081U	mg/kg	0.0057	0.00081	1		05/02/12 18:34	67-66-3	
Chloromethane	0.0012U	mg/kg	0.0057	0.0012	1		05/02/12 18:34	74-87-3	
Dibromochloromethane	0.0017U	mg/kg	0.0057	0.0017	1		05/02/12 18:34	124-48-1	
1,2-Dibromoethane (EDB)	0.0030U	mg/kg	0.0057	0.0030	1		05/02/12 18:34	106-93-4	
1,2-Dichlorobenzene	0.0012U	mg/kg	0.0057	0.0012	1		05/02/12 18:34	95-50-1	
1,3-Dichlorobenzene	0.0014U	mg/kg	0.0057	0.0014	1		05/02/12 18:34	541-73-1	
1,4-Dichlorobenzene	0.0014U	mg/kg	0.0057	0.0014	1		05/02/12 18:34	106-46-7	
1,1-Dichloroethane	0.00090U	mg/kg	0.0057	0.00090	1		05/02/12 18:34	75-34-3	
1,2-Dichloroethane	0.0010U	mg/kg	0.0057	0.0010	1		05/02/12 18:34	107-06-2	
1,2-Dichloroethene (Total)	0.0037U	mg/kg	0.011	0.0037	1		05/02/12 18:34	540-59-0	
1,1-Dichloroethene	0.00092U	mg/kg	0.0057	0.00092	1		05/02/12 18:34	75-35-4	
cis-1,2-Dichloroethene	0.0028U	mg/kg	0.0057	0.0028	1		05/02/12 18:34	156-59-2	
trans-1,2-Dichloroethene	0.00093U	mg/kg	0.0057	0.00093	1		05/02/12 18:34	156-60-5	
1,2-Dichloropropane	0.0018U	mg/kg	0.0057	0.0018	1		05/02/12 18:34	78-87-5	
cis-1,3-Dichloropropene	0.0018U	mg/kg	0.0057	0.0018	1		05/02/12 18:34	10061-01-5	
trans-1,3-Dichloropropene	0.0018U	mg/kg	0.0057	0.0018	1		05/02/12 18:34	10061-02-6	
Ethylbenzene	0.0029U	mg/kg	0.0057	0.0029	1		05/02/12 18:34	100-41-4	
2-Hexanone	0.0013U	mg/kg	0.011	0.0013	1		05/02/12 18:34	591-78-6	
Isopropylbenzene (Cumene)	0.0012U	mg/kg	0.0057	0.0012	1		05/02/12 18:34	98-82-8	
Methylene Chloride	0.0015U	mg/kg	0.0057	0.0015	1		05/02/12 18:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.0012U	mg/kg	0.011	0.0012	1		05/02/12 18:34	108-10-1	
Methyl-tert-butyl ether	0.00081U	mg/kg	0.0057	0.00081	1		05/02/12 18:34	1634-04-4	
Naphthalene	0.0029U	mg/kg	0.0057	0.0029	1		05/02/12 18:34	91-20-3	
Styrene	0.0013U	mg/kg	0.0057	0.0013	1		05/02/12 18:34	100-42-5	
1,1,2,2-Tetrachloroethane	0.0010U	mg/kg	0.0057	0.0010	1		05/02/12 18:34	79-34-5	
Tetrachloroethene	0.00082U	mg/kg	0.0057	0.00082	1		05/02/12 18:34	127-18-4	
Toluene	0.0013J	mg/kg	0.0057	0.00073	1		05/02/12 18:34	108-88-3	
1,1,1-Trichloroethane	0.0029U	mg/kg	0.0057	0.0029	1		05/02/12 18:34	71-55-6	
1,1,2-Trichloroethane	0.0010U	mg/kg	0.0057	0.0010	1		05/02/12 18:34	79-00-5	
Trichloroethene	0.00086U	mg/kg	0.0057	0.00086	1		05/02/12 18:34	79-01-6	
1,2,4-Trimethylbenzene	0.0013U	mg/kg	0.0057	0.0013	1		05/02/12 18:34	95-63-6	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 14 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 54904B

Pace Project No.: 3068551

Sample: TRAMP-C3-S-2-4 **Lab ID: 3068551002** Collected: 04/25/12 09:24 Received: 04/27/12 17:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.0015U	mg/kg	0.0057	0.0015	1		05/02/12 18:34	108-67-8	
Vinyl chloride	0.00092U	mg/kg	0.0057	0.00092	1		05/02/12 18:34	75-01-4	
Xylene (Total)	0.0035U	mg/kg	0.017	0.0035	1		05/02/12 18:34	1330-20-7	
m&p-Xylene	0.0022U	mg/kg	0.011	0.0022	1		05/02/12 18:34	179601-23-1	
o-Xylene	0.0013U	mg/kg	0.0057	0.0013	1		05/02/12 18:34	95-47-6	
Surrogates									
Toluene-d8 (S)	98 %		70-130		1		05/02/12 18:34	2037-26-5	
4-Bromofluorobenzene (S)	102 %		70-130		1		05/02/12 18:34	460-00-4	
1,2-Dichloroethane-d4 (S)	115 %		70-130		1		05/02/12 18:34	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	7.6	%	0.10	0.10	1		05/03/12 16:25		

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-A9-S-2-4 **Lab ID: 3068551003** Collected: 04/25/12 13:15 Received: 04/27/12 17:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010B Preparation Method: EPA 3050									
Lead	0.26U	mg/kg	0.31	0.26	1	05/02/12 11:45	05/03/12 09:18	7439-92-1	
8260 MSV 5030 Low Level Analytical Method: EPA 8260									
Acetone	0.0033U	mg/kg	0.017	0.0033	1		05/02/12 18:57	67-64-1	
Benzene	0.0013U	mg/kg	0.0085	0.0013	1		05/02/12 18:57	71-43-2	
Bromodichloromethane	0.0031U	mg/kg	0.0085	0.0031	1		05/02/12 18:57	75-27-4	
Bromoform	0.0043U	mg/kg	0.0085	0.0043	1		05/02/12 18:57	75-25-2	
Bromomethane	0.0050U	mg/kg	0.0085	0.0050	1		05/02/12 18:57	74-83-9	
TOTAL BTEX	0.051J	mg/kg	0.051	0.012	1		05/02/12 18:57		
2-Butanone (MEK)	0.0021U	mg/kg	0.017	0.0021	1		05/02/12 18:57	78-93-3	
Carbon disulfide	0.38	mg/kg	0.0085	0.0013	1		05/02/12 18:57	75-15-0	
Carbon tetrachloride	0.0015U	mg/kg	0.0085	0.0015	1		05/02/12 18:57	56-23-5	
Chlorobenzene	0.0017U	mg/kg	0.0085	0.0017	1		05/02/12 18:57	108-90-7	
Chloroethane	0.0028U	mg/kg	0.0085	0.0028	1		05/02/12 18:57	75-00-3	
Chloroform	0.0012U	mg/kg	0.0085	0.0012	1		05/02/12 18:57	67-66-3	
Chloromethane	0.0018U	mg/kg	0.0085	0.0018	1		05/02/12 18:57	74-87-3	
Dibromochloromethane	0.0026U	mg/kg	0.0085	0.0026	1		05/02/12 18:57	124-48-1	
1,2-Dibromoethane (EDB)	0.0044U	mg/kg	0.0085	0.0044	1		05/02/12 18:57	106-93-4	
1,2-Dichlorobenzene	0.0019U	mg/kg	0.0085	0.0019	1		05/02/12 18:57	95-50-1	
1,3-Dichlorobenzene	0.0022U	mg/kg	0.0085	0.0022	1		05/02/12 18:57	541-73-1	
1,4-Dichlorobenzene	0.0021U	mg/kg	0.0085	0.0021	1		05/02/12 18:57	106-46-7	
1,1-Dichloroethane	0.0013U	mg/kg	0.0085	0.0013	1		05/02/12 18:57	75-34-3	
1,2-Dichloroethane	0.0015U	mg/kg	0.0085	0.0015	1		05/02/12 18:57	107-06-2	
1,2-Dichloroethene (Total)	0.0056U	mg/kg	0.017	0.0056	1		05/02/12 18:57	540-59-0	
1,1-Dichloroethene	0.0014U	mg/kg	0.0085	0.0014	1		05/02/12 18:57	75-35-4	
cis-1,2-Dichloroethene	0.0042U	mg/kg	0.0085	0.0042	1		05/02/12 18:57	156-59-2	
trans-1,2-Dichloroethene	0.0014U	mg/kg	0.0085	0.0014	1		05/02/12 18:57	156-60-5	
1,2-Dichloropropane	0.0027U	mg/kg	0.0085	0.0027	1		05/02/12 18:57	78-87-5	
cis-1,3-Dichloropropene	0.0027U	mg/kg	0.0085	0.0027	1		05/02/12 18:57	10061-01-5	
trans-1,3-Dichloropropene	0.0028U	mg/kg	0.0085	0.0028	1		05/02/12 18:57	10061-02-6	
Ethylbenzene	0.015	mg/kg	0.0085	0.0044	1		05/02/12 18:57	100-41-4	
2-Hexanone	0.0020U	mg/kg	0.017	0.0020	1		05/02/12 18:57	591-78-6	
Isopropylbenzene (Cumene)	0.021	mg/kg	0.0085	0.0018	1		05/02/12 18:57	98-82-8	
Methylene Chloride	0.0023U	mg/kg	0.0085	0.0023	1		05/02/12 18:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.0017U	mg/kg	0.017	0.0017	1		05/02/12 18:57	108-10-1	
Methyl-tert-butyl ether	0.0012U	mg/kg	0.0085	0.0012	1		05/02/12 18:57	1634-04-4	
Naphthalene	0.072	mg/kg	0.0085	0.0043	1		05/02/12 18:57	91-20-3	
Styrene	0.0019U	mg/kg	0.0085	0.0019	1		05/02/12 18:57	100-42-5	
1,1,2,2-Tetrachloroethane	0.0015U	mg/kg	0.0085	0.0015	1		05/02/12 18:57	79-34-5	
Tetrachloroethene	0.0012U	mg/kg	0.0085	0.0012	1		05/02/12 18:57	127-18-4	
Toluene	0.0011U	mg/kg	0.0085	0.0011	1		05/02/12 18:57	108-88-3	
1,1,1-Trichloroethane	0.0044U	mg/kg	0.0085	0.0044	1		05/02/12 18:57	71-55-6	
1,1,2-Trichloroethane	0.0016U	mg/kg	0.0085	0.0016	1		05/02/12 18:57	79-00-5	
Trichloroethene	0.0013U	mg/kg	0.0085	0.0013	1		05/02/12 18:57	79-01-6	
1,2,4-Trimethylbenzene	0.28	mg/kg	0.0085	0.0020	1		05/02/12 18:57	95-63-6	

ANALYTICAL RESULTS

Project: 54904B

Pace Project No.: 3068551

Sample: TRAMP-A9-S-2-4 **Lab ID: 3068551003** Collected: 04/25/12 13:15 Received: 04/27/12 17:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level									
Analytical Method: EPA 8260									
1,3,5-Trimethylbenzene	0.088	mg/kg	0.0085	0.0023	1		05/02/12 18:57	108-67-8	
Vinyl chloride	0.0014U	mg/kg	0.0085	0.0014	1		05/02/12 18:57	75-01-4	
Xylene (Total)	0.036	mg/kg	0.025	0.0052	1		05/02/12 18:57	1330-20-7	
m&p-Xylene	0.022	mg/kg	0.017	0.0033	1		05/02/12 18:57	179601-23-1	
o-Xylene	0.014	mg/kg	0.0085	0.0019	1		05/02/12 18:57	95-47-6	
Surrogates									
Toluene-d8 (S)	112	%	70-130		1		05/02/12 18:57	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		1		05/02/12 18:57	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%	70-130		1		05/02/12 18:57	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	9.9	%	0.10	0.10	1		05/03/12 16:25		

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-H0-W Lab ID: 3068551004 Collected: 04/24/12 10:25 Received: 04/27/12 17:55 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	05/07/12 10:32	05/07/12 19:08	106-93-4	
200.7 Metals, Dissolved Analytical Method: EPA 200.7 Preparation Method: EPA 200.7									
Lead, Dissolved	1.0U	ug/L	5.0	1.0	1	05/01/12 16:25	05/02/12 10:21	7439-92-1	
8260 MSV Analytical Method: EPA 8260									
Acetone	2.6U	ug/L	10.0	2.6	1		05/04/12 17:38	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		05/04/12 17:38	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 17:38	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		05/04/12 17:38	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		05/04/12 17:38	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		05/04/12 17:38	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		05/04/12 17:38	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		05/04/12 17:38	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		05/04/12 17:38	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 17:38	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		05/04/12 17:38	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		05/04/12 17:38	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		05/04/12 17:38	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 17:38	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		05/04/12 17:38	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		05/04/12 17:38	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		05/04/12 17:38	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		05/04/12 17:38	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		05/04/12 17:38	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		05/04/12 17:38	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		05/04/12 17:38	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		05/04/12 17:38	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		05/04/12 17:38	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		05/04/12 17:38	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		05/04/12 17:38	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		05/04/12 17:38	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 17:38	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		05/04/12 17:38	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		05/04/12 17:38	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		05/04/12 17:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		05/04/12 17:38	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		05/04/12 17:38	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		05/04/12 17:38	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		05/04/12 17:38	100-42-5	
1,1,1,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		05/04/12 17:38	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		05/04/12 17:38	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		05/04/12 17:38	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		05/04/12 17:38	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		05/04/12 17:38	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		05/04/12 17:38	79-00-5	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 18 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-H0-W		Lab ID: 3068551004		Collected: 04/24/12 10:25		Received: 04/27/12 17:55		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Trichloroethene	0.15U	ug/L	1.0	0.15	1		05/04/12 17:38	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		05/04/12 17:38	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 17:38	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		05/04/12 17:38	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		05/04/12 17:38	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		05/04/12 17:38	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		05/04/12 17:38	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98 %		70-130		1		05/04/12 17:38	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		70-130		1		05/04/12 17:38	17060-07-0	
Toluene-d8 (S)	92 %		70-130		1		05/04/12 17:38	2037-26-5	

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-I4-W Lab ID: 3068551005 Collected: 04/24/12 12:25 Received: 04/27/12 17:55 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	05/07/12 10:32	05/07/12 20:31	106-93-4	
200.7 Metals, Dissolved Analytical Method: EPA 200.7 Preparation Method: EPA 200.7									
Lead, Dissolved	1.0U	ug/L	5.0	1.0	1	05/01/12 16:25	05/02/12 10:34	7439-92-1	
8260 MSV Analytical Method: EPA 8260									
Acetone	2.6U	ug/L	10.0	2.6	1		05/04/12 18:05	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		05/04/12 18:05	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 18:05	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		05/04/12 18:05	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		05/04/12 18:05	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		05/04/12 18:05	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		05/04/12 18:05	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		05/04/12 18:05	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		05/04/12 18:05	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:05	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		05/04/12 18:05	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		05/04/12 18:05	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		05/04/12 18:05	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 18:05	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		05/04/12 18:05	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		05/04/12 18:05	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		05/04/12 18:05	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		05/04/12 18:05	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		05/04/12 18:05	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		05/04/12 18:05	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		05/04/12 18:05	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		05/04/12 18:05	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		05/04/12 18:05	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		05/04/12 18:05	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		05/04/12 18:05	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		05/04/12 18:05	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:05	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		05/04/12 18:05	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		05/04/12 18:05	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		05/04/12 18:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		05/04/12 18:05	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		05/04/12 18:05	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		05/04/12 18:05	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		05/04/12 18:05	100-42-5	
1,1,1,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		05/04/12 18:05	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:05	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		05/04/12 18:05	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		05/04/12 18:05	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		05/04/12 18:05	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		05/04/12 18:05	79-00-5	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 20 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-I4-W		Lab ID: 3068551005	Collected: 04/24/12 12:25	Received: 04/27/12 17:55	Matrix: Water				
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Trichloroethene	0.15U	ug/L	1.0	0.15	1		05/04/12 18:05	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		05/04/12 18:05	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:05	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		05/04/12 18:05	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		05/04/12 18:05	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		05/04/12 18:05	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		05/04/12 18:05	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		05/04/12 18:05	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130		1		05/04/12 18:05	17060-07-0	
Toluene-d8 (S)	96	%	70-130		1		05/04/12 18:05	2037-26-5	

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-Trip Lab ID: 3068551006 Collected: 04/24/12 00:01 Received: 04/27/12 17:55 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 8260									
Acetone	2.6U	ug/L	10.0	2.6	1		05/04/12 17:12	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		05/04/12 17:12	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 17:12	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		05/04/12 17:12	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		05/04/12 17:12	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		05/04/12 17:12	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		05/04/12 17:12	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		05/04/12 17:12	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		05/04/12 17:12	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 17:12	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		05/04/12 17:12	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		05/04/12 17:12	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		05/04/12 17:12	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 17:12	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		05/04/12 17:12	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		05/04/12 17:12	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		05/04/12 17:12	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		05/04/12 17:12	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		05/04/12 17:12	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		05/04/12 17:12	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		05/04/12 17:12	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		05/04/12 17:12	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		05/04/12 17:12	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		05/04/12 17:12	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		05/04/12 17:12	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		05/04/12 17:12	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 17:12	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		05/04/12 17:12	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		05/04/12 17:12	98-82-8	
Methylene Chloride	1.3	ug/L	1.0	0.23	1		05/04/12 17:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		05/04/12 17:12	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		05/04/12 17:12	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		05/04/12 17:12	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		05/04/12 17:12	100-42-5	
1,1,2,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		05/04/12 17:12	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		05/04/12 17:12	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		05/04/12 17:12	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		05/04/12 17:12	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		05/04/12 17:12	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		05/04/12 17:12	79-00-5	
Trichloroethene	0.15U	ug/L	1.0	0.15	1		05/04/12 17:12	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		05/04/12 17:12	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 17:12	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		05/04/12 17:12	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		05/04/12 17:12	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		05/04/12 17:12	179601-23-1	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 22 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-Trip		Lab ID: 3068551006		Collected: 04/24/12 00:01		Received: 04/27/12 17:55		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
o-Xylene	0.10U	ug/L	1.0	0.10	1		05/04/12 17:12	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		05/04/12 17:12	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		05/04/12 17:12	17060-07-0	
Toluene-d8 (S)	94	%	70-130		1		05/04/12 17:12	2037-26-5	

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-C10-W Lab ID: 3068551007 Collected: 04/25/12 12:10 Received: 04/27/12 17:55 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	05/07/12 10:32	05/07/12 20:52	106-93-4	
200.7 Metals, Dissolved Analytical Method: EPA 200.7 Preparation Method: EPA 200.7									
Lead, Dissolved	1.0U	ug/L	5.0	1.0	1	05/01/12 16:25	05/02/12 10:37	7439-92-1	
8260 MSV Analytical Method: EPA 8260									
Acetone	2.6U	ug/L	10.0	2.6	1		05/04/12 18:31	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		05/04/12 18:31	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 18:31	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		05/04/12 18:31	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		05/04/12 18:31	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		05/04/12 18:31	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		05/04/12 18:31	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		05/04/12 18:31	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		05/04/12 18:31	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:31	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		05/04/12 18:31	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		05/04/12 18:31	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		05/04/12 18:31	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 18:31	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		05/04/12 18:31	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		05/04/12 18:31	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		05/04/12 18:31	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		05/04/12 18:31	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		05/04/12 18:31	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		05/04/12 18:31	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		05/04/12 18:31	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		05/04/12 18:31	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		05/04/12 18:31	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		05/04/12 18:31	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		05/04/12 18:31	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		05/04/12 18:31	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:31	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		05/04/12 18:31	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		05/04/12 18:31	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		05/04/12 18:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		05/04/12 18:31	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		05/04/12 18:31	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		05/04/12 18:31	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		05/04/12 18:31	100-42-5	
1,1,2,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		05/04/12 18:31	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:31	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		05/04/12 18:31	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		05/04/12 18:31	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		05/04/12 18:31	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		05/04/12 18:31	79-00-5	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 24 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-C10-W		Lab ID: 3068551007	Collected: 04/25/12 12:10	Received: 04/27/12 17:55	Matrix: Water				
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Trichloroethene	0.15U	ug/L	1.0	0.15	1		05/04/12 18:31	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		05/04/12 18:31	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:31	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		05/04/12 18:31	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		05/04/12 18:31	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		05/04/12 18:31	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		05/04/12 18:31	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		05/04/12 18:31	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		05/04/12 18:31	17060-07-0	
Toluene-d8 (S)	90	%	70-130		1		05/04/12 18:31	2037-26-5	

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-D7-W Lab ID: 3068551008 Collected: 04/25/12 09:55 Received: 04/27/12 17:55 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	05/07/12 10:32	05/07/12 21:12	106-93-4	
200.7 Metals, Dissolved Analytical Method: EPA 200.7 Preparation Method: EPA 200.7									
Lead, Dissolved	1.0U	ug/L	5.0	1.0	1	05/01/12 16:25	05/02/12 10:40	7439-92-1	
8260 MSV Analytical Method: EPA 8260									
Acetone	2.6U	ug/L	10.0	2.6	1		05/04/12 18:57	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		05/04/12 18:57	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 18:57	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		05/04/12 18:57	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		05/04/12 18:57	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		05/04/12 18:57	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		05/04/12 18:57	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		05/04/12 18:57	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		05/04/12 18:57	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:57	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		05/04/12 18:57	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		05/04/12 18:57	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		05/04/12 18:57	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 18:57	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		05/04/12 18:57	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		05/04/12 18:57	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		05/04/12 18:57	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		05/04/12 18:57	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		05/04/12 18:57	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		05/04/12 18:57	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		05/04/12 18:57	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		05/04/12 18:57	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		05/04/12 18:57	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		05/04/12 18:57	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		05/04/12 18:57	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		05/04/12 18:57	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:57	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		05/04/12 18:57	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		05/04/12 18:57	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		05/04/12 18:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		05/04/12 18:57	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		05/04/12 18:57	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		05/04/12 18:57	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		05/04/12 18:57	100-42-5	
1,1,1,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		05/04/12 18:57	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:57	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		05/04/12 18:57	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		05/04/12 18:57	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		05/04/12 18:57	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		05/04/12 18:57	79-00-5	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 26 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-D7-W		Lab ID: 3068551008		Collected: 04/25/12 09:55		Received: 04/27/12 17:55		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Trichloroethene	0.15U	ug/L	1.0	0.15	1		05/04/12 18:57	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		05/04/12 18:57	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 18:57	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		05/04/12 18:57	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		05/04/12 18:57	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		05/04/12 18:57	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		05/04/12 18:57	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		05/04/12 18:57	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	70-130		1		05/04/12 18:57	17060-07-0	
Toluene-d8 (S)	92	%	70-130		1		05/04/12 18:57	2037-26-5	

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-A9-W Lab ID: 3068551009 Collected: 04/26/12 14:25 Received: 04/27/12 17:55 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	05/07/12 10:32	05/07/12 21:33	106-93-4	
200.7 Metals, Dissolved Analytical Method: EPA 200.7 Preparation Method: EPA 200.7									
Lead, Dissolved	1.0U	ug/L	5.0	1.0	1	05/01/12 16:25	05/02/12 11:05	7439-92-1	
8260 MSV Analytical Method: EPA 8260									
Acetone	2.6U	ug/L	10.0	2.6	1		05/04/12 19:24	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		05/04/12 19:24	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 19:24	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		05/04/12 19:24	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		05/04/12 19:24	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		05/04/12 19:24	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		05/04/12 19:24	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		05/04/12 19:24	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		05/04/12 19:24	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 19:24	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		05/04/12 19:24	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		05/04/12 19:24	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		05/04/12 19:24	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 19:24	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		05/04/12 19:24	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		05/04/12 19:24	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		05/04/12 19:24	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		05/04/12 19:24	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		05/04/12 19:24	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		05/04/12 19:24	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		05/04/12 19:24	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		05/04/12 19:24	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		05/04/12 19:24	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		05/04/12 19:24	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		05/04/12 19:24	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		05/04/12 19:24	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 19:24	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		05/04/12 19:24	591-78-6	
Isopropylbenzene (Cumene)	1.7	ug/L	1.0	0.12	1		05/04/12 19:24	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		05/04/12 19:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		05/04/12 19:24	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		05/04/12 19:24	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		05/04/12 19:24	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		05/04/12 19:24	100-42-5	
1,1,2,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		05/04/12 19:24	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		05/04/12 19:24	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		05/04/12 19:24	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		05/04/12 19:24	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		05/04/12 19:24	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		05/04/12 19:24	79-00-5	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 28 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-A9-W		Lab ID: 3068551009		Collected: 04/26/12 14:25		Received: 04/27/12 17:55		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Trichloroethene	0.15U	ug/L	1.0	0.15	1		05/04/12 19:24	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		05/04/12 19:24	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 19:24	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		05/04/12 19:24	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		05/04/12 19:24	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		05/04/12 19:24	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		05/04/12 19:24	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		05/04/12 19:24	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		05/04/12 19:24	17060-07-0	
Toluene-d8 (S)	95	%	70-130		1		05/04/12 19:24	2037-26-5	

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-C3-W Lab ID: 3068551010 Collected: 04/26/12 10:35 Received: 04/27/12 17:55 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	05/07/12 10:32	05/07/12 21:54	106-93-4	
200.7 Metals, Dissolved Analytical Method: EPA 200.7 Preparation Method: EPA 200.7									
Lead, Dissolved	1.0U	ug/L	5.0	1.0	1	05/01/12 16:25	05/02/12 11:08	7439-92-1	
8260 MSV Analytical Method: EPA 8260									
Acetone	2.6U	ug/L	10.0	2.6	1		05/04/12 19:50	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		05/04/12 19:50	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 19:50	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		05/04/12 19:50	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		05/04/12 19:50	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		05/04/12 19:50	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		05/04/12 19:50	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		05/04/12 19:50	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		05/04/12 19:50	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 19:50	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		05/04/12 19:50	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		05/04/12 19:50	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		05/04/12 19:50	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 19:50	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		05/04/12 19:50	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		05/04/12 19:50	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		05/04/12 19:50	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		05/04/12 19:50	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		05/04/12 19:50	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		05/04/12 19:50	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		05/04/12 19:50	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		05/04/12 19:50	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		05/04/12 19:50	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		05/04/12 19:50	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		05/04/12 19:50	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		05/04/12 19:50	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 19:50	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		05/04/12 19:50	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		05/04/12 19:50	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		05/04/12 19:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		05/04/12 19:50	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		05/04/12 19:50	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		05/04/12 19:50	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		05/04/12 19:50	100-42-5	
1,1,2,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		05/04/12 19:50	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		05/04/12 19:50	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		05/04/12 19:50	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		05/04/12 19:50	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		05/04/12 19:50	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		05/04/12 19:50	79-00-5	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 30 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-C3-W		Lab ID: 3068551010	Collected: 04/26/12 10:35	Received: 04/27/12 17:55	Matrix: Water				
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Trichloroethene	0.15U	ug/L	1.0	0.15	1		05/04/12 19:50	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		05/04/12 19:50	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 19:50	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		05/04/12 19:50	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		05/04/12 19:50	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		05/04/12 19:50	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		05/04/12 19:50	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100 %		70-130		1		05/04/12 19:50	460-00-4	
1,2-Dichloroethane-d4 (S)	107 %		70-130		1		05/04/12 19:50	17060-07-0	
Toluene-d8 (S)	91 %		70-130		1		05/04/12 19:50	2037-26-5	

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-EB-0426 Lab ID: 3068551011 Collected: 04/26/12 11:00 Received: 04/27/12 17:55 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromoethane (EDB)	0.0079U	ug/L	0.050	0.0079	1	05/07/12 10:32	05/07/12 22:15	106-93-4	
200.7 Metals, Dissolved Analytical Method: EPA 200.7 Preparation Method: EPA 200.7									
Lead, Dissolved	1.0U	ug/L	5.0	1.0	1	05/01/12 16:25	05/02/12 11:11	7439-92-1	
8260 MSV Analytical Method: EPA 8260									
Acetone	2.6U	ug/L	10.0	2.6	1		05/04/12 20:16	67-64-1	
Benzene	0.065U	ug/L	1.0	0.065	1		05/04/12 20:16	71-43-2	
Bromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 20:16	74-97-5	
Bromodichloromethane	0.15U	ug/L	1.0	0.15	1		05/04/12 20:16	75-27-4	
Bromoform	0.25U	ug/L	1.0	0.25	1		05/04/12 20:16	75-25-2	
Bromomethane	0.37U	ug/L	1.0	0.37	1		05/04/12 20:16	74-83-9	
2-Butanone (MEK)	1.1U	ug/L	10.0	1.1	1		05/04/12 20:16	78-93-3	
Carbon disulfide	0.18U	ug/L	1.0	0.18	1		05/04/12 20:16	75-15-0	
Carbon tetrachloride	0.24U	ug/L	1.0	0.24	1		05/04/12 20:16	56-23-5	
Chlorobenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 20:16	108-90-7	
Chloroethane	0.48U	ug/L	1.0	0.48	1		05/04/12 20:16	75-00-3	
Chloroform	0.16U	ug/L	1.0	0.16	1		05/04/12 20:16	67-66-3	
Chloromethane	0.21U	ug/L	1.0	0.21	1		05/04/12 20:16	74-87-3	
Dibromochloromethane	0.22U	ug/L	1.0	0.22	1		05/04/12 20:16	124-48-1	
1,2-Dichlorobenzene	0.23U	ug/L	1.0	0.23	1		05/04/12 20:16	95-50-1	
1,3-Dichlorobenzene	0.26U	ug/L	1.0	0.26	1		05/04/12 20:16	541-73-1	
1,4-Dichlorobenzene	0.17U	ug/L	1.0	0.17	1		05/04/12 20:16	106-46-7	
1,1-Dichloroethane	0.16U	ug/L	1.0	0.16	1		05/04/12 20:16	75-34-3	
1,2-Dichloroethane	0.14U	ug/L	1.0	0.14	1		05/04/12 20:16	107-06-2	
1,2-Dichloroethene (Total)	0.38U	ug/L	2.0	0.38	1		05/04/12 20:16	540-59-0	
1,1-Dichloroethene	0.14U	ug/L	1.0	0.14	1		05/04/12 20:16	75-35-4	
cis-1,2-Dichloroethene	0.20U	ug/L	1.0	0.20	1		05/04/12 20:16	156-59-2	
trans-1,2-Dichloroethene	0.18U	ug/L	1.0	0.18	1		05/04/12 20:16	156-60-5	
1,2-Dichloropropane	0.23U	ug/L	1.0	0.23	1		05/04/12 20:16	78-87-5	
cis-1,3-Dichloropropene	0.19U	ug/L	1.0	0.19	1		05/04/12 20:16	10061-01-5	
trans-1,3-Dichloropropene	0.23U	ug/L	1.0	0.23	1		05/04/12 20:16	10061-02-6	
Ethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 20:16	100-41-4	
2-Hexanone	0.34U	ug/L	10.0	0.34	1		05/04/12 20:16	591-78-6	
Isopropylbenzene (Cumene)	0.12U	ug/L	1.0	0.12	1		05/04/12 20:16	98-82-8	
Methylene Chloride	0.23U	ug/L	1.0	0.23	1		05/04/12 20:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.29U	ug/L	10.0	0.29	1		05/04/12 20:16	108-10-1	
Methyl-tert-butyl ether	0.19U	ug/L	1.0	0.19	1		05/04/12 20:16	1634-04-4	
Naphthalene	0.33U	ug/L	2.0	0.33	1		05/04/12 20:16	91-20-3	
Styrene	0.18U	ug/L	1.0	0.18	1		05/04/12 20:16	100-42-5	
1,1,1,2-Tetrachloroethane	0.22U	ug/L	1.0	0.22	1		05/04/12 20:16	79-34-5	
Tetrachloroethene	0.12U	ug/L	1.0	0.12	1		05/04/12 20:16	127-18-4	
Toluene	0.11U	ug/L	1.0	0.11	1		05/04/12 20:16	108-88-3	
1,2,4-Trichlorobenzene	0.33U	ug/L	1.0	0.33	1		05/04/12 20:16	120-82-1	
1,1,1-Trichloroethane	0.19U	ug/L	1.0	0.19	1		05/04/12 20:16	71-55-6	
1,1,2-Trichloroethane	0.23U	ug/L	1.0	0.23	1		05/04/12 20:16	79-00-5	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 32 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 54904B
Pace Project No.: 3068551

Sample: TRAMP-EB-0426 Lab ID: 3068551011 Collected: 04/26/12 11:00 Received: 04/27/12 17:55 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 8260									
Trichloroethene	0.15U	ug/L	1.0	0.15	1		05/04/12 20:16	79-01-6	
1,2,4-Trimethylbenzene	0.13U	ug/L	1.0	0.13	1		05/04/12 20:16	95-63-6	
1,3,5-Trimethylbenzene	0.12U	ug/L	1.0	0.12	1		05/04/12 20:16	108-67-8	
Vinyl chloride	0.13U	ug/L	1.0	0.13	1		05/04/12 20:16	75-01-4	
Xylene (Total)	0.31U	ug/L	3.0	0.31	1		05/04/12 20:16	1330-20-7	
m&p-Xylene	0.21U	ug/L	2.0	0.21	1		05/04/12 20:16	179601-23-1	
o-Xylene	0.10U	ug/L	1.0	0.10	1		05/04/12 20:16	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99 %		70-130		1		05/04/12 20:16	460-00-4	
1,2-Dichloroethane-d4 (S)	107 %		70-130		1		05/04/12 20:16	17060-07-0	
Toluene-d8 (S)	95 %		70-130		1		05/04/12 20:16	2037-26-5	

QUALITY CONTROL DATA

Project: 54904B
Pace Project No.: 3068551

QC Batch: GCSV/4402 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 3068551004, 3068551005, 3068551007, 3068551008, 3068551009, 3068551010, 3068551011

METHOD BLANK: 438262 Matrix: Water
Associated Lab Samples: 3068551004, 3068551005, 3068551007, 3068551008, 3068551009, 3068551010, 3068551011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.0079U	0.050	05/07/12 17:23	

LABORATORY CONTROL SAMPLE: 438263

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.25	0.26	102	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 438264 438265

Parameter	Units	3068551004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	0.0079 U	.4	.4	0.39	0.40	97	100	60-140	3	25	

QUALITY CONTROL DATA

Project: 54904B
Pace Project No.: 3068551

QC Batch: MPRP/8217 Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 Analysis Description: 200.7 Metals, Dissolved
Associated Lab Samples: 3068551004, 3068551005, 3068551007, 3068551008, 3068551009, 3068551010, 3068551011

METHOD BLANK: 436202 Matrix: Water
Associated Lab Samples: 3068551004, 3068551005, 3068551007, 3068551008, 3068551009, 3068551010, 3068551011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead, Dissolved	ug/L	1.0U	5.0	05/02/12 10:05	

LABORATORY CONTROL SAMPLE: 436203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead, Dissolved	ug/L	500	497	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 436205 436206

Parameter	Units	3068551004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead, Dissolved	ug/L	1.0U	500	500	500	495	100	99	80-120	1	20	

SAMPLE DUPLICATE: 436204

Parameter	Units	3068551004 Result	Dup Result	RPD	Max RPD	Qualifiers
Lead, Dissolved	ug/L	1.0U	1.0U		20	

QUALITY CONTROL DATA

Project: 54904B
Pace Project No.: 3068551

QC Batch: MPRP/8226 Analysis Method: EPA 6010B
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 3068551001, 3068551002, 3068551003

METHOD BLANK: 436722 Matrix: Solid
Associated Lab Samples: 3068551001, 3068551002, 3068551003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	0.42U	0.50	05/03/12 10:32	

LABORATORY CONTROL SAMPLE: 436723

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	51.1	102	80-120	

MATRIX SPIKE SAMPLE: 436725

Parameter	Units	3068551001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	16.7	29.4	42.1	86	80-120	

SAMPLE DUPLICATE: 436724

Parameter	Units	3068551001 Result	Dup Result	RPD	Max RPD	Qualifiers
Lead	mg/kg	16.7	15.4	8	20	

QUALITY CONTROL DATA

Project: 54904B
Pace Project No.: 3068551

QC Batch: MSV/12614 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035 Low
Associated Lab Samples: 3068551001, 3068551002, 3068551003

METHOD BLANK: 436800 Matrix: Solid

Associated Lab Samples: 3068551001, 3068551002, 3068551003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	mg/kg	0.0026U	0.0050	05/02/12 15:14	
1,1,2,2-Tetrachloroethane	mg/kg	0.00089U	0.0050	05/02/12 15:14	
1,1,2-Trichloroethane	mg/kg	0.00092U	0.0050	05/02/12 15:14	
1,1-Dichloroethane	mg/kg	0.00079U	0.0050	05/02/12 15:14	
1,1-Dichloroethene	mg/kg	0.00081U	0.0050	05/02/12 15:14	
1,2,4-Trimethylbenzene	mg/kg	0.0012U	0.0050	05/02/12 15:14	
1,2-Dibromoethane (EDB)	mg/kg	0.0026U	0.0050	05/02/12 15:14	
1,2-Dichlorobenzene	mg/kg	0.0011U	0.0050	05/02/12 15:14	
1,2-Dichloroethane	mg/kg	0.00091U	0.0050	05/02/12 15:14	
1,2-Dichloropropane	mg/kg	0.0016U	0.0050	05/02/12 15:14	
1,3,5-Trimethylbenzene	mg/kg	0.0014U	0.0050	05/02/12 15:14	
1,3-Dichlorobenzene	mg/kg	0.0013U	0.0050	05/02/12 15:14	
1,4-Dichlorobenzene	mg/kg	0.0012U	0.0050	05/02/12 15:14	
2-Butanone (MEK)	mg/kg	0.0013U	0.010	05/02/12 15:14	
2-Hexanone	mg/kg	0.0012U	0.010	05/02/12 15:14	
4-Methyl-2-pentanone (MIBK)	mg/kg	0.0010U	0.010	05/02/12 15:14	
Acetone	mg/kg	0.011	0.010	05/02/12 15:14	B,C9
Benzene	mg/kg	0.00078U	0.0050	05/02/12 15:14	
Bromodichloromethane	mg/kg	0.0018U	0.0050	05/02/12 15:14	
Bromoform	mg/kg	0.0025U	0.0050	05/02/12 15:14	
Bromomethane	mg/kg	0.0029U	0.0050	05/02/12 15:14	
Carbon disulfide	mg/kg	0.00077U	0.0050	05/02/12 15:14	
Carbon tetrachloride	mg/kg	0.00089U	0.0050	05/02/12 15:14	
Chlorobenzene	mg/kg	0.00099U	0.0050	05/02/12 15:14	
Chloroethane	mg/kg	0.0016U	0.0050	05/02/12 15:14	
Chloroform	mg/kg	0.00071U	0.0050	05/02/12 15:14	
Chloromethane	mg/kg	0.0010U	0.0050	05/02/12 15:14	
cis-1,2-Dichloroethene	mg/kg	0.0025U	0.0050	05/02/12 15:14	
cis-1,3-Dichloropropene	mg/kg	0.0016U	0.0050	05/02/12 15:14	
Dibromochloromethane	mg/kg	0.0015U	0.0050	05/02/12 15:14	
Ethylbenzene	mg/kg	0.0026U	0.0050	05/02/12 15:14	
Isopropylbenzene (Cumene)	mg/kg	0.0011U	0.0050	05/02/12 15:14	
m&p-Xylene	mg/kg	0.0019U	0.010	05/02/12 15:14	
Methyl-tert-butyl ether	mg/kg	0.00071U	0.0050	05/02/12 15:14	
Methylene Chloride	mg/kg	0.0013U	0.0050	05/02/12 15:14	
Naphthalene	mg/kg	0.0025U	0.0050	05/02/12 15:14	
o-Xylene	mg/kg	0.0011U	0.0050	05/02/12 15:14	
Styrene	mg/kg	0.0011U	0.0050	05/02/12 15:14	
Tetrachloroethene	mg/kg	0.00073U	0.0050	05/02/12 15:14	
Toluene	mg/kg	0.00064U	0.0050	05/02/12 15:14	
TOTAL BTEX	mg/kg	0.0070U	0.030	05/02/12 15:14	
trans-1,2-Dichloroethene	mg/kg	0.00082U	0.0050	05/02/12 15:14	
trans-1,3-Dichloropropene	mg/kg	0.0016U	0.0050	05/02/12 15:14	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 37 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 54904B
Pace Project No.: 3068551

METHOD BLANK: 436800

Matrix: Solid

Associated Lab Samples: 3068551001, 3068551002, 3068551003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	mg/kg	0.00076U	0.0050	05/02/12 15:14	
Vinyl chloride	mg/kg	0.00081U	0.0050	05/02/12 15:14	
Xylene (Total)	mg/kg	0.0031U	0.015	05/02/12 15:14	
1,2-Dichloroethane-d4 (S)	%	96	70-130	05/02/12 15:14	
4-Bromofluorobenzene (S)	%	101	70-130	05/02/12 15:14	
Toluene-d8 (S)	%	100	70-130	05/02/12 15:14	

LABORATORY CONTROL SAMPLE: 436801

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	.02	0.017	87	55-141	
1,1,2,2-Tetrachloroethane	mg/kg	.02	0.013	67	58-124	
1,1,2-Trichloroethane	mg/kg	.02	0.014	69	70-118 L0	
1,1-Dichloroethane	mg/kg	.02	0.016	78	64-127	
1,1-Dichloroethene	mg/kg	.02	0.017	84	50-133	
1,2,4-Trimethylbenzene	mg/kg	.02	0.017	86	67-130	
1,2-Dibromoethane (EDB)	mg/kg	.02	0.013	63	67-117 L0	
1,2-Dichlorobenzene	mg/kg	.02	0.016	81	67-122	
1,2-Dichloroethane	mg/kg	.02	0.015	74	54-132	
1,2-Dichloropropane	mg/kg	.02	0.016	79	68-112	
1,3,5-Trimethylbenzene	mg/kg	.02	0.017	83	65-132	
1,3-Dichlorobenzene	mg/kg	.02	0.016	82	65-127	
1,4-Dichlorobenzene	mg/kg	.02	0.016	82	66-127	
2-Butanone (MEK)	mg/kg	.02	0.014	70	54-135	
2-Hexanone	mg/kg	.02	0.013	67	58-148	
4-Methyl-2-pentanone (MIBK)	mg/kg	.02	0.013	64	55-142	
Acetone	mg/kg	.02	0.021	103	39-200	
Benzene	mg/kg	.02	0.015	76	65-130	
Bromodichloromethane	mg/kg	.02	0.014	71	57-125	
Bromoform	mg/kg	.02	0.012	61	53-121	
Bromomethane	mg/kg	.02	0.017	83	30-167	
Carbon disulfide	mg/kg	.02	0.015	75	49-150	
Carbon tetrachloride	mg/kg	.02	0.017	83	47-146	
Chlorobenzene	mg/kg	.02	0.016	79	67-124	
Chloroethane	mg/kg	.02	0.022	111	34-170	
Chloroform	mg/kg	.02	0.016	81	63-128	
Chloromethane	mg/kg	.02	0.069	343	39-159 L3	
cis-1,2-Dichloroethene	mg/kg	.02	0.016	78	64-126	
cis-1,3-Dichloropropene	mg/kg	.02	0.015	75	66-124	
Dibromochloromethane	mg/kg	.02	0.014	71	56-122	
Ethylbenzene	mg/kg	.02	0.015	74	65-131	
Isopropylbenzene (Cumene)	mg/kg	.02	0.018	88	64-137	
m&p-Xylene	mg/kg	.04	0.032	81	63-136	
Methyl-tert-butyl ether	mg/kg	.02	0.016	79	71-130	
Methylene Chloride	mg/kg	.02	0.011	55	45-136	

QUALITY CONTROL DATA

Project: 54904B

Pace Project No.: 3068551

LABORATORY CONTROL SAMPLE: 436801

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	mg/kg	.02	0.013	67	70-123	L0
o-Xylene	mg/kg	.02	0.016	82	68-129	
Styrene	mg/kg	.02	0.015	76	64-122	
Tetrachloroethene	mg/kg	.02	0.015	77	61-138	
Toluene	mg/kg	.02	0.017	84	63-132	
TOTAL BTEX	mg/kg		0.096			
trans-1,2-Dichloroethene	mg/kg	.02	0.016	80	60-130	
trans-1,3-Dichloropropene	mg/kg	.02	0.014	70	58-116	
Trichloroethene	mg/kg	.02	0.016	79	65-131	
Vinyl chloride	mg/kg	.02	0.021	104	49-149	
Xylene (Total)	mg/kg	.06	0.049	81	65-134	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			102	70-130	
Toluene-d8 (S)	%			102	70-130	

QUALITY CONTROL DATA

Project: 54904B
Pace Project No.: 3068551

QC Batch: MSV/12641 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3068551004, 3068551005, 3068551006, 3068551007, 3068551008, 3068551009, 3068551010, 3068551011

METHOD BLANK: 437729 Matrix: Water
Associated Lab Samples: 3068551004, 3068551005, 3068551006, 3068551007, 3068551008, 3068551009, 3068551010, 3068551011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	0.19U	1.0	05/04/12 14:09	
1,1,2,2-Tetrachloroethane	ug/L	0.22U	1.0	05/04/12 14:09	
1,1,2-Trichloroethane	ug/L	0.23U	1.0	05/04/12 14:09	
1,1-Dichloroethane	ug/L	0.16U	1.0	05/04/12 14:09	
1,1-Dichloroethene	ug/L	0.14U	1.0	05/04/12 14:09	
1,2,4-Trichlorobenzene	ug/L	0.33U	1.0	05/04/12 14:09	
1,2,4-Trimethylbenzene	ug/L	0.13U	1.0	05/04/12 14:09	
1,2-Dichlorobenzene	ug/L	0.23U	1.0	05/04/12 14:09	
1,2-Dichloroethane	ug/L	0.14U	1.0	05/04/12 14:09	
1,2-Dichloropropane	ug/L	0.23U	1.0	05/04/12 14:09	
1,3,5-Trimethylbenzene	ug/L	0.12U	1.0	05/04/12 14:09	
1,3-Dichlorobenzene	ug/L	0.26U	1.0	05/04/12 14:09	
1,4-Dichlorobenzene	ug/L	0.17U	1.0	05/04/12 14:09	
2-Butanone (MEK)	ug/L	1.1U	10.0	05/04/12 14:09	
2-Hexanone	ug/L	0.34U	10.0	05/04/12 14:09	
4-Methyl-2-pentanone (MIBK)	ug/L	0.29U	10.0	05/04/12 14:09	
Acetone	ug/L	2.6U	10.0	05/04/12 14:09	
Benzene	ug/L	0.065U	1.0	05/04/12 14:09	
Bromochloromethane	ug/L	0.22U	1.0	05/04/12 14:09	
Bromodichloromethane	ug/L	0.15U	1.0	05/04/12 14:09	
Bromoform	ug/L	0.25U	1.0	05/04/12 14:09	
Bromomethane	ug/L	0.37U	1.0	05/04/12 14:09	
Carbon disulfide	ug/L	0.18U	1.0	05/04/12 14:09	
Carbon tetrachloride	ug/L	0.24U	1.0	05/04/12 14:09	
Chlorobenzene	ug/L	0.12U	1.0	05/04/12 14:09	
Chloroethane	ug/L	0.48U	1.0	05/04/12 14:09	
Chloroform	ug/L	0.16U	1.0	05/04/12 14:09	
Chloromethane	ug/L	0.21U	1.0	05/04/12 14:09	
cis-1,2-Dichloroethene	ug/L	0.20U	1.0	05/04/12 14:09	
cis-1,3-Dichloropropene	ug/L	0.19U	1.0	05/04/12 14:09	
Dibromochloromethane	ug/L	0.22U	1.0	05/04/12 14:09	
Ethylbenzene	ug/L	0.12U	1.0	05/04/12 14:09	
Isopropylbenzene (Cumene)	ug/L	0.12U	1.0	05/04/12 14:09	
m&p-Xylene	ug/L	0.21U	2.0	05/04/12 14:09	
Methyl-tert-butyl ether	ug/L	0.19U	1.0	05/04/12 14:09	
Methylene Chloride	ug/L	2.9	1.0	05/04/12 14:09	B,C9
Naphthalene	ug/L	0.33U	2.0	05/04/12 14:09	
o-Xylene	ug/L	0.10U	1.0	05/04/12 14:09	
Styrene	ug/L	0.18U	1.0	05/04/12 14:09	
Tetrachloroethene	ug/L	0.12U	1.0	05/04/12 14:09	
Toluene	ug/L	0.11U	1.0	05/04/12 14:09	
trans-1,2-Dichloroethene	ug/L	0.18U	1.0	05/04/12 14:09	
trans-1,3-Dichloropropene	ug/L	0.23U	1.0	05/04/12 14:09	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 40 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 54904B
Pace Project No.: 3068551

METHOD BLANK: 437729

Matrix: Water

Associated Lab Samples: 3068551004, 3068551005, 3068551006, 3068551007, 3068551008, 3068551009, 3068551010, 3068551011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	0.15U	1.0	05/04/12 14:09	
Vinyl chloride	ug/L	0.13U	1.0	05/04/12 14:09	
Xylene (Total)	ug/L	0.31U	3.0	05/04/12 14:09	
1,2-Dichloroethane-d4 (S)	%	101	70-130	05/04/12 14:09	
4-Bromofluorobenzene (S)	%	105	70-130	05/04/12 14:09	
Toluene-d8 (S)	%	94	70-130	05/04/12 14:09	

LABORATORY CONTROL SAMPLE: 437730

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.1	95	64.3-127	
1,1,2,2-Tetrachloroethane	ug/L	20	18.9	94	64.6-121	
1,1,2-Trichloroethane	ug/L	20	19.2	96	75.6-120	
1,1-Dichloroethane	ug/L	20	18.9	95	68.5-122	
1,1-Dichloroethene	ug/L	20	18.7	94	57.1-120	
1,2,4-Trichlorobenzene	ug/L	20	19.7	98	67.6-129	
1,2,4-Trimethylbenzene	ug/L	20	18.0	90	68.9-125	
1,2-Dichlorobenzene	ug/L	20	19.7	99	69.6-120	
1,2-Dichloroethane	ug/L	20	17.6	88	60.5-133	
1,2-Dichloropropane	ug/L	20	17.9	90	71-120	
1,3,5-Trimethylbenzene	ug/L	20	18.0	90	67.3-129	
1,3-Dichlorobenzene	ug/L	20	19.2	96	68.4-121	
1,4-Dichlorobenzene	ug/L	20	19.8	99	68.5-123	
2-Butanone (MEK)	ug/L	20	18.3	92	55.7-138	
2-Hexanone	ug/L	20	15.1	75	67-133	
4-Methyl-2-pentanone (MIBK)	ug/L	20	16.4	82	64.5-121	
Acetone	ug/L	20	17.0	85	57.6-168	
Benzene	ug/L	20	18.6	93	69.8-120	
Bromochloromethane	ug/L	20	19.9	100	65.5-125	
Bromodichloromethane	ug/L	20	16.6	83	66.5-120	
Bromoform	ug/L	20	17.8	89	61.1-120	
Bromomethane	ug/L	20	53.2	266	10.6-200	L3
Carbon disulfide	ug/L	20	20.8	104	60.2-122	
Carbon tetrachloride	ug/L	20	18.0	90	60.1-127	
Chlorobenzene	ug/L	20	18.6	93	72-120	
Chloroethane	ug/L	20	24.5	122	36.8-142	
Chloroform	ug/L	20	18.1	90	69-122	
Chloromethane	ug/L	20	21.5	107	37.2-129	
cis-1,2-Dichloroethene	ug/L	20	18.0	90	69.5-123	
cis-1,3-Dichloropropene	ug/L	20	16.7	83	74.3-120	
Dibromochloromethane	ug/L	20	17.6	88	66.1-120	
Ethylbenzene	ug/L	20	18.1	90	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	19.5	98	68.3-129	
m&p-Xylene	ug/L	40	37.5	94	70.4-130	
Methyl-tert-butyl ether	ug/L	20	21.0	105	66.4-144	

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 41 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 54904B
Pace Project No.: 3068551

LABORATORY CONTROL SAMPLE: 437730

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	20	20.6	103	61.5-125	
Naphthalene	ug/L	20	16.9	85	61-135	
o-Xylene	ug/L	20	18.0	90	70.6-127	
Styrene	ug/L	20	18.2	91	69.9-120	
Tetrachloroethene	ug/L	20	19.9	99	63.4-121	
Toluene	ug/L	20	18.3	91	71.5-120	
trans-1,2-Dichloroethene	ug/L	20	18.1	91	64.1-120	
trans-1,3-Dichloropropene	ug/L	20	17.7	88	71-120	
Trichloroethene	ug/L	20	18.4	92	65.9-120	
Vinyl chloride	ug/L	20	22.9	114	51-127	
Xylene (Total)	ug/L	60	55.5	93	70-129	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			94	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 437731

437732

Parameter	Units	3068626001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	22.4	22.9	112	115	64.3-127	2	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.2	19.6	96	98	64.6-121	2	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.5	20.1	102	100	75.6-120	2	30	
1,1-Dichloroethane	ug/L	ND	20	20	22.4	22.6	112	113	68.5-122	.5	30	
1,1-Dichloroethene	ug/L	ND	20	20	21.7	22.3	109	111	57.1-120	3	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	17.1	18.2	85	91	67.6-129	7	30	
1,2,4-Trimethylbenzene	ug/L	ND	20	20	18.6	19.3	93	96	68.9-125	4	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	20.1	20.7	101	104	69.6-120	3	30	
1,2-Dichloroethane	ug/L	ND	20	20	19.8	20.0	99	100	60.5-133	1	30	
1,2-Dichloropropane	ug/L	ND	20	20	19.1	20.2	95	101	71-120	6	30	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	18.4	19.0	92	95	67.3-129	3	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	20.5	21.1	103	106	68.4-121	3	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	20.2	21.1	101	105	68.5-123	4	30	
2-Butanone (MEK)	ug/L	ND	20	20	16.6	18.1	83	90	55.7-138	8	30	
2-Hexanone	ug/L	ND	20	20	11.5	12.8	57	64	67-133	11	30	M0
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	13.0	14.6	65	73	64.5-121	12	30	
Acetone	ug/L	ND	20	20	14.6	16.1	73	81	57.6-168	10	30	
Benzene	ug/L	ND	20	20	20.7	21.3	103	107	69.8-120	3	30	
Bromochloromethane	ug/L	ND	20	20	22.8	22.9	114	115	65.5-125	.5	30	
Bromodichloromethane	ug/L	ND	20	20	17.6	18.2	88	91	66.5-120	3	30	
Bromoform	ug/L	ND	20	20	17.3	18.3	87	91	61.1-120	5	30	
Bromomethane	ug/L	ND	20	20	40.7	48.7	203	244	10.6-200	18	30	M0
Carbon disulfide	ug/L	ND	20	20	22.6	21.8	113	109	60.2-122	3	30	
Carbon tetrachloride	ug/L	ND	20	20	20.2	21.3	101	107	60.1-127	6	30	
Chlorobenzene	ug/L	ND	20	20	20.3	20.8	101	104	72-120	2	30	
Chloroethane	ug/L	ND	20	20	30.7	29.4	154	147	36.8-142	4	30	M0
Chloroform	ug/L	ND	20	20	21.3	21.6	107	108	69-122	1	30	
Chloromethane	ug/L	ND	20	20	27.3	27.6	136	138	37.2-129	1	30	M0

Date: 05/14/2012 03:47 PM

REPORT OF LABORATORY ANALYSIS

Page 42 of 46

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 54904B

Pace Project No.: 3068551

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 437731 437732											
Parameter	Units	3068626001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.1	20.5	101	102	69.5-123	2	30
cis-1,3-Dichloropropene	ug/L	ND	20	20	15.9	17.3	79	86	74.3-120	8	30
Dibromochloromethane	ug/L	ND	20	20	17.7	18.4	89	92	66.1-120	4	30
Ethylbenzene	ug/L	ND	20	20	18.6	19.6	93	98	70.9-124	5	30
Isopropylbenzene (Cumene)	ug/L	ND	20	20	20.2	20.7	101	103	68.3-129	2	30
m&p-Xylene	ug/L	ND	40	40	38.9	41.3	97	103	70.4-130	6	30
Methyl-tert-butyl ether	ug/L	ND	20	20	19.5	19.5	97	98	66.4-144	.2	30
Methylene Chloride	ug/L	1.3	20	20	22.8	22.7	108	107	61.5-125	.5	30
Naphthalene	ug/L	ND	20	20	12.8	13.7	64	69	61-135	7	30
o-Xylene	ug/L	ND	20	20	18.3	19.3	91	96	70.6-127	5	30
Styrene	ug/L	ND	20	20	17.9	19.1	89	95	69.9-120	7	30
Tetrachloroethene	ug/L	ND	20	20	21.7	22.8	109	114	63.4-121	5	30
Toluene	ug/L	ND	20	20	19.6	20.3	98	102	71.5-120	4	30
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.8	21.0	104	105	64.1-120	1	30
trans-1,3-Dichloropropene	ug/L	ND	20	20	17.0	17.4	85	87	71-120	3	30
Trichloroethene	ug/L	ND	20	20	20.1	21.2	100	106	65.9-120	6	30
Vinyl chloride	ug/L	ND	20	20	29.4	29.6	147	148	51-127	.8	30 MO
Xylene (Total)	ug/L	ND	60	60	57.2	60.5	95	101	70-129	6	30
1,2-Dichloroethane-d4 (S)	%						104	94	70-130		
4-Bromofluorobenzene (S)	%						94	97	70-130		
Toluene-d8 (S)	%						88	91	70-130		

QUALITY CONTROL DATA

Project: 54904B

Pace Project No.: 3068551

QC Batch:	PMST/3142	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	3068551001, 3068551002, 3068551003		

SAMPLE DUPLICATE: 437123

Parameter	Units	3068791001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	13.3	13.1	2	20	

SAMPLE DUPLICATE: 437124

Parameter	Units	3068791002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	11.3	9.9	13	20	

QUALIFIERS

Project: 54904B
Pace Project No.: 3068551

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/12614

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

C9 Common Laboratory Contaminant.

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 54904B
Pace Project No.: 3068551

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3068551004	TRAMP-H0-W	EPA 8011	GCSV/4402	EPA 8011	GCSV/4403
3068551005	TRAMP-I4-W	EPA 8011	GCSV/4402	EPA 8011	GCSV/4403
3068551007	TRAMP-C10-W	EPA 8011	GCSV/4402	EPA 8011	GCSV/4403
3068551008	TRAMP-D7-W	EPA 8011	GCSV/4402	EPA 8011	GCSV/4403
3068551009	TRAMP-A9-W	EPA 8011	GCSV/4402	EPA 8011	GCSV/4403
3068551010	TRAMP-C3-W	EPA 8011	GCSV/4402	EPA 8011	GCSV/4403
3068551011	TRAMP-EB-0426	EPA 8011	GCSV/4402	EPA 8011	GCSV/4403
3068551004	TRAMP-H0-W	EPA 200.7	MPRP/8217	EPA 200.7	ICP/7664
3068551005	TRAMP-I4-W	EPA 200.7	MPRP/8217	EPA 200.7	ICP/7664
3068551007	TRAMP-C10-W	EPA 200.7	MPRP/8217	EPA 200.7	ICP/7664
3068551008	TRAMP-D7-W	EPA 200.7	MPRP/8217	EPA 200.7	ICP/7664
3068551009	TRAMP-A9-W	EPA 200.7	MPRP/8217	EPA 200.7	ICP/7664
3068551010	TRAMP-C3-W	EPA 200.7	MPRP/8217	EPA 200.7	ICP/7664
3068551011	TRAMP-EB-0426	EPA 200.7	MPRP/8217	EPA 200.7	ICP/7664
3068551001	TRAMP-C10-S-2-4	EPA 3050	MPRP/8226	EPA 6010B	ICP/7672
3068551002	TRAMP-C3-S-2-4	EPA 3050	MPRP/8226	EPA 6010B	ICP/7672
3068551003	TRAMP-A9-S-2-4	EPA 3050	MPRP/8226	EPA 6010B	ICP/7672
3068551001	TRAMP-C10-S-2-4	EPA 8260	MSV/12614		
3068551002	TRAMP-C3-S-2-4	EPA 8260	MSV/12614		
3068551003	TRAMP-A9-S-2-4	EPA 8260	MSV/12614		
3068551004	TRAMP-H0-W	EPA 8260	MSV/12641		
3068551005	TRAMP-I4-W	EPA 8260	MSV/12641		
3068551006	TRAMP-Trip	EPA 8260	MSV/12641		
3068551007	TRAMP-C10-W	EPA 8260	MSV/12641		
3068551008	TRAMP-D7-W	EPA 8260	MSV/12641		
3068551009	TRAMP-A9-W	EPA 8260	MSV/12641		
3068551010	TRAMP-C3-W	EPA 8260	MSV/12641		
3068551011	TRAMP-EB-0426	EPA 8260	MSV/12641		
3068551001	TRAMP-C10-S-2-4	ASTM D2974-87	PMST/3142		
3068551002	TRAMP-C3-S-2-4	ASTM D2974-87	PMST/3142		
3068551003	TRAMP-A9-S-2-4	ASTM D2974-87	PMST/3142		

ATTACHMENT D
DATA VALIDATION REPORTS

QA/QC ASSESSMENT OF 6010 TOTAL LEAD DATA

Soil Samples

911th Air Force Reserve Station, Pittsburgh, PA

Pace Analytical Sample Delivery Group Nos. 3067598, 3067855, and 3068551

(April 12 to 25, 2012 – Soil Samples)

This data validation summary pertains to soil samples, which were collected in April 2012 at the 911th Airlift Wing T-Ramp. The samples were analyzed for total lead according to SW-846 Methods 6010B (Inductively Coupled Plasma-Mass Spectrometry). Data validation procedures follow the criteria in the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010) and Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses. Results of the data validation effort are summarized in the attached narrative summary. Data qualifiers (as appropriate) have been added to the corresponding EDD file.

Data Qualifier Definitions:

- B The analyte was detected substantially above the level reported in laboratory or field blanks (EPA Region III).
- U The analyte was analyzed for, but was not detected at or above the adjusted quantitation limit for the sample and method.
- J The analyte was positively identified, but the associated numerical value is an estimated concentration of the analyte in the sample based on its associated quality measures.
- NJ The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.” The associated numerical value is the analyte’s approximate concentration.
- UJ The analyte was not detected at or above the adjusted quantitation limit. However, the reported quantitation limit is approximate.
- R The sample results are rejected and the data are unusable because certain criteria were not met. The presence or absence of the analyte cannot be verified.

Data Completeness: The data deliverables pertaining to 8 soil samples were complete. The samples were analyzed in two analytical batches.

Chain of Custody: The chain of custody documentation was complete. No qualifiers were applied.

Holding Times: The samples were digested (following 3050) and analyzed within the required holding times; no qualifiers were applied.

Initial and Continuing Calibration Verification: The frequency of the ICV and CCV runs were met and their values were within control limits (90-110 % recovery) for the samples; no qualifiers were applied.

Initial and Continuing Calibration Blanks: The frequency of the initial calibration blank and the continuing calibration blanks were met. The ICB and CCB values associated with the reported data were within control limits for the samples. No qualifiers were applied.

Blanks: The two prep blank samples reported the target compound as not detected. No qualifiers were applied.

ICP Interference Check Sample: ICSs were analyzed at the beginning and end of each run. All results were within control limits ($\pm 20\%$ of the mean value); no qualifiers were applied.

Field Duplicates: One field duplicate soil sample was collected and analyzed in this SDG. Review of the results between the **sample** and its *duplicate* indicates a relatively good correlation (i.e., RPD < 20 %). No qualifiers were applied.

Sample	Duplicate	Correlation
H0-S-6-8	DUP-2	Good correlation

Laboratory Duplicates: The frequency of duplicate analyses was met and the relative percent differences were within control limits (RPD < 20 %) for one of the two duplicate samples. The RPD for the other duplicate sample was greater than 20%, most likely due to variability resulting from the sub-sampling of non-homogeneous soil samples. For technical review (versus method review), the guidelines allow for less restrictive criteria; therefore, no qualifiers were applied.

Matrix Spike/ MS Duplicate The percent recoveries and relative percent differences were within control limits for the two site-specific MS/MSD soil samples. No qualifiers were applied.

Laboratory Control Sample: The percent recoveries were within control limits (%REC between 80% to 120%) for the two LCS samples; no qualifiers were applied.

ICP Serial Dilution: Serial dilution analysis (for compounds detected >50X the MDL) was not applicable; thus, no qualifiers were applied.

OVERALL ASSESSMENT OF TOTAL LEAD SOIL SAMPLES: The checked data were within acceptable quantitation and qualification limits. No major issues were encountered during the soil sample data validation effort and no qualifiers were applied.

QA/QA ASSESSMENT OF 8260B VOC DATA

Soil Samples

911th Air Force Reserve Station, Pittsburgh, PA

**Pace Analytical Sample Delivery Group Nos. 3067598, 3067855, and 3068551
(April 12 to 25, 2012 – Soil Samples)**

This data validation summary pertains to soil samples, which were collected in April 2012 at the 911th Airlift Wing T-Ramp. The samples were analyzed according to SW-846 Method 8260B for volatile organic compounds (VOC) by Gas Chromatography/Mass Spectrometry (GC/MS). Data validation procedures follow the criteria in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) and Region III Modifications to National Functional Guidelines for Organic Data Review Multi-Media, Multi-Concentration (OLMO1.0-OLMO1.9; September 1994). Results of the data validation effort are summarized in the attached narrative summary. Data qualifiers (as appropriate) have been added to the corresponding EDD file.

Data Qualifier Definitions:

- B** The analyte was detected substantially above the level reported in laboratory or field blanks (EPA Region III).
- U** The analyte was analyzed for, but was not detected at or above the adjusted quantitation limit for the sample and method.
- J** The analyte was positively identified, but the associated numerical value is an estimated concentration of the analyte in the sample based on its associated quality measures.
- NJ** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.” The associated numerical value is the analyte’s approximate concentration.
- UJ** The analyte was not detected at or above the adjusted quantitation limit. However, the reported quantitation limit is approximate.
- R** The sample results are rejected and the data are unusable because certain criteria were not met. The presence or absence of the analyte cannot be verified.

Data Completeness: The data deliverables pertaining to 8 soil samples were complete. The samples were analyzed in three analytical batches.

Chain of Custody: The chain of custody documentation was complete. No qualifiers were applied.

Holding Times: The samples were analyzed within the required holding times; no qualifiers were applied.

GC/MS Instrument Performance Check: Bromofluorobenzene (BFB) was run at least every 12 hours of analysis and all BFB ion abundance criteria were within control limits. No qualifiers were applied.

Initial Calibration: Target compounds had relative response factors (RRF) above the allowable minimum (0.05). The percent relative standard deviations (%RSD) of the RRFs were below the allowable maximum (30%) for the target compounds. No qualifiers were applied.

Continuing Calibration: The target compounds had % Ds below the allowable maximum (25%). No qualifiers were applied.

Blanks: The three method blank samples (431907, 432740, and 436800) reported all target compounds as not detected, with the exception of acetone. ***Qualifiers*** - Positive detects for acetone that are less than the action level (10x the greatest blank concentration) are flagged (B) when detected in the associated samples. No action is taken if the compound is not detected in the associated samples, or if the compound is detected above the action level. Qualifiers were applied.

System Monitoring (Surrogate Recovery): All surrogate recoveries for 1,2-dichloroethane, toluene-d8, and 4-bromofluorobenzene were within control and advisory limits. No qualifiers were applied.

Field Duplicates: One field duplicate soil sample was collected and analyzed in this SDG. Although very few compounds were detected, review of the results between the **sample** and its *duplicate* indicates a relatively fair correlation. No qualifiers were applied.

Sample	Duplicate	Correlation
H0-S-6-8	DUP-3	Fair correlation

Matrix Spike/MS Duplicate For the site-specific MS/MSD sample, the percent recoveries and relative percent differences were outside control limits for several compounds. No action/qualifier is taken on MS/MSD data alone if the associated LCS samples are within the control limits. However, positive results for these compounds in the corresponding samples are considered estimates and flagged (J); qualification of non-detects is not necessary. See LCS Analyses.

Laboratory Control Sample: The percent recoveries were within control limits for one of the three LCS samples (431908); no qualifiers were applied to the corresponding samples. For LCS sample (436801), the percent recoveries were within control limits, with the exception of four compounds. Positive results for these compounds in the corresponding samples are considered estimates and flagged (J); qualification of non-detects is not necessary. One qualifier was applied to a corresponding sample. For LCS sample (432741), the percent recoveries were within control limits, with the exception of acetone. The positive result of acetone in the corresponding sample is considered an estimate and flagged (J).

Internal Standard Area Summary: All internal standard areas and retention times for chlorobenzene-d5, 1,4-difluorobenzene, and chlorobenzene-d5 were within control limits. No qualifiers were applied.

Compound Identification: Positive-result compounds met RRT and ion spectra criteria. No qualifiers were applied.

Quantitation/Reporting Limits: Compounds that are qualitatively identified at concentrations below their respective Contract Required Quantitation Limits (i.e., reporting limits) are reported with a (J) qualifier to indicate that they are quantitative estimates.

OVERALL ASSESSMENT OF VOC SOIL SAMPLES: The checked data were within acceptable quantitation and qualification limits. Minor issues were identified and qualifiers added; no major issues, however, were encountered during the data validation effort.

QA/QC ASSESSMENT OF 6010 DISSOLVED LEAD DATA

Water Samples

911th Air Force Reserve Station, Pittsburgh, PA

Pace Analytical Sample Delivery Group Nos. 3067855 and 3068551

(April 16 to 25, 2012 – Water Samples)

This data validation summary pertains to water samples, which were collected in April 2012 at the 911th Airlift Wing T-Ramp. The samples were analyzed for total lead according to SW-846 Methods 200.7 (Inductively Coupled Plasma-Atomic Spectrometry). Data validation procedures follow the criteria in the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010) and Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses. Results of the data validation effort are summarized in the attached narrative summary. Data qualifiers (as appropriate) have been added to the corresponding EDD file.

Data Qualifier Definitions:

- B The analyte was detected substantially above the level reported in laboratory or field blanks (EPA Region III).
- U The analyte was analyzed for, but was not detected at or above the adjusted quantitation limit for the sample and method.
- J The analyte was positively identified, but the associated numerical value is an estimated concentration of the analyte in the sample based on its associated quality measures.
- NJ The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.” The associated numerical value is the analyte’s approximate concentration.
- UJ The analyte was not detected at or above the adjusted quantitation limit. However, the reported quantitation limit is approximate.
- R The sample results are rejected and the data are unusable because certain criteria were not met. The presence or absence of the analyte cannot be verified.

Data Completeness: The data deliverables pertaining to nine water samples, two equipment rinsate samples, and one field blank sample were complete. The samples were analyzed in two analytical batches.

Chain of Custody: The chain of custody documentation was complete. No qualifiers were applied.

Holding Times: The samples were prepared (following EPA 200.7) and analyzed within the required holding times; no qualifiers were applied.

Initial and Continuing Calibration Verification: The frequency of the ICV and CCV runs were met and their values were within control limits (90-110 % recovery) for the samples; no qualifiers were applied.

Initial and Continuing Calibration Blanks: The frequency of the initial calibration blank and the continuing calibration blanks were met. The ICB and CCB values associated with the reported data were within control limits for the samples. No qualifiers were applied.

Blanks: One of the two method blank samples (436202) reported the target compound as not detected. The other method blank (432950) detected the target compound (lead). **Field Blank** –The field blank sample (3067855004) detected the target compound (lead).

Equipment Rinsate Blank – One of the two rinsate blank samples (3068551011) reported the target compound as not detected. The other rinsate blank (3067855005) detected the target compound (lead). **Qualifiers** - Positive detects for lead that are less than the action level (5x the greatest blank concentration) are flagged (B) when detected in the associated samples. No action is taken if the compound is not detected in the associated samples, or if the compound is detected above the action level. Qualifiers were applied.

ICP Interference Check Sample: ICSs were analyzed at the beginning and end of each run. All results were within control limits ($\pm 20\%$ of the mean value); no qualifiers were applied.

Field Duplicates: A field duplicate water samples was collected and analyzed in this SDG. Review of the results between the **sample** and its *duplicate* indicates a relatively good correlation (i.e., RPD < 20 %). No qualifiers were applied.

Sample	Duplicate	Correlation
L2-W	Duplicate 1	Good correlation

Laboratory Duplicates: The frequency of duplicate analyses was met and the relative percent differences were within control limits (RPD < 20 %); no qualifiers were applied.

Matrix Spike/MS Duplicate The percent recoveries and relative percent differences were within control limits for the two site-specific MS/MSD samples. No qualifiers were applied.

Laboratory Control Sample: The percent recoveries were within control limits (%REC between 80% to 120%) for the two LCS samples; no qualifiers were applied.

ICP Serial Dilution: Serial dilution analysis (for compounds detected >50X the MDL) was not applicable; thus, no qualifiers were applied.

OVERALL ASSESSMENT OF TOTAL LEAD WATER SAMPLES: The checked data were within acceptable quantitation and qualification limits. Minor issues were identified and qualifiers added; no major issues, however, were encountered during the data validation effort.

QA/QA ASSESSMENT OF 8260B VOC & 8011-EDB DATA

Soil Samples

911th Air Force Reserve Station, Pittsburgh, PA

Pace Analytical Sample Delivery Group Nos. 3067855 and 3068551

(April 16 to 25, 2012 – Water Samples)

This data validation summary pertains to water samples, which were collected in April 2012 at the 911th Airlift Wing T-Ramp. The samples were analyzed according to SW-846 Method 8260B for volatile organic compounds (VOC) by Gas Chromatography/Mass Spectrometry (GC/MS) and for low-level 1,2-dibromoethane (EDB) by micro-extraction / GC according to SW-846 Method 8011. Data validation procedures follow the criteria in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) and Region III Modifications to National Functional Guidelines for Organic Data Review Multi-Media, Multi-Concentration (OLMO1.0-OLMO1.9; September 1994). Results of the data validation effort are summarized in the attached narrative summary. Data qualifiers (as appropriate) have been added to the corresponding EDD file.

Data Qualifier Definitions:

- B The analyte was detected substantially above the level reported in laboratory or field blanks (EPA Region III).
- U The analyte was analyzed for, but was not detected at or above the adjusted quantitation limit for the sample and method.
- J The analyte was positively identified, but the associated numerical value is an estimated concentration of the analyte in the sample based on its associated quality measures.
- NJ The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.” The associated numerical value is the analyte’s approximate concentration.
- UJ The analyte was not detected at or above the adjusted quantitation limit. However, the reported quantitation limit is approximate.
- R The sample results are rejected and the data are unusable because certain criteria were not met. The presence or absence of the analyte cannot be verified.

Data Completeness: The data deliverables pertaining to 9 water samples, 2 equipment rinsate samples, 2 trip blank samples, and 1 field blank sample were complete. The samples were analyzed in three analytical batches for the VOC analyses and two analytical batches for EDB.

Chain of Custody: The chain of custody documentation was complete. No qualifiers were applied.

Holding Times: The samples were analyzed within the required holding times; no qualifiers were applied.

GC/MS Instrument Performance Check: Bromofluorobenzene (BFB) was run at least every 12 hours of analysis and all BFB ion abundance criteria were within control limits. No qualifiers were applied.

Initial Calibration: Target compounds had relative response factors (RRF) above the allowable minimum (0.05). The percent relative standard deviations (%RSD) of the RRFs were below the allowable maximum (30%) for the target compounds. No qualifiers were applied.

Continuing Calibration: The target compounds had % Ds below the allowable maximum (25%). No qualifiers were applied.

Blanks: **EDB:** The two method blank samples (432585 and 438262) reported the target compound as not detected; no qualifiers were applied. **VOC:** The three method blank samples (432597, 433104, and 437729) reported all target compounds as not detected, with the exception of methylene chloride. **Field Blank** –The field blank sample (3067855004) reported all target compounds as not detected, with the exception of acetone. **Equipment Rinsate Blank** – One of the two rinsate blank samples (3068551011) reported the target compounds as not detected. The other rinsate blank (3067855005) reported all target compounds as not detected, with the exception of acetone. **Trip Blank** –The two blank samples (3067855006 and 3068551006) reported all target compounds as not detected, with the exception of acetone. **Qualifiers** - Positive detects for acetone and methylene chloride that are less than the action level (10x the greatest blank concentration) are flagged (B) when detected in the associated samples. No action is taken if the compound is not detected in the associated samples, or if the compound is detected above the action level. Qualifiers were applied.

System Monitoring (Surrogate Recovery): All surrogate recoveries for 1,2-dichloroethane, toluene-d8, and 4-bromofluorobenzene were within control and advisory limits. No qualifiers were applied.

Field Duplicates: One field duplicate water sample was collected and analyzed in this SDG. Although very few compounds were detected, review of the results between the **sample** and its *duplicate* indicates a relatively good correlation for the two field duplicates. No qualifiers were applied.

Sample	Duplicate	Correlation
L2-W	Duplicate	Good correlation

Matrix Spike/MS Duplicate For the two of the three site-specific MS/MSD sample, the percent recoveries and relative percent differences were within control limits for the target compounds. For the other site-specific MS/MSD sample, the percent recoveries and relative percent differences were within control limits, with the exception of five compounds. No action/qualifier is taken on MS/MSD data alone if the associated LCS samples are within the control limits. However, positive results for these compounds in the corresponding samples are considered estimates and flagged (J); qualification of non-detects is not necessary. See LCS Analyses.

Laboratory Control Sample: The percent recoveries were within control limits for two of the three LCS samples. For the other LCS sample, the percent recoveries were within control limits, with the exception of bromomethane. Positive results for bromomethane compounds in the corresponding samples are considered estimates and flagged (J); qualification of non-detects is not necessary. No Qualifiers were applied

Internal Standard Area Summary: All internal standard areas and retention times for chlorobenzene-d5, 1,4-difluorobenzene, and chlorobenzene-d5 were within control limits. No qualifiers were applied.

Compound Identification: Positive-result compounds met RRT and ion spectra criteria. No qualifiers were applied.

Quantitation/Reporting Limits: Compounds that are qualitatively identified at concentrations below their respective Contract Required Quantitation Limits (i.e., reporting limits) are reported with a (J) qualifier to indicate that they are quantitative estimates.

OVERALL ASSESSMENT OF VOC SOIL SAMPLES: The checked data were within acceptable quantitation and qualification limits. Minor issues were identified and qualifiers added; no major issues, however, were encountered during the data validation effort.

QA/QC ASSESSMENT OF 6010 TOTAL LEAD DATA

Soil Samples

911th Air Force Reserve Station, Pittsburgh, PA

Pace Analytical Sample Delivery Group Nos. 3066909 and 3067122

(April 02 to 11, 2012 – Soil Samples)

This data validation summary pertains to soil samples, which were collected in April 2012 at the 911th Airlift Wing T-Ramp. The samples were analyzed for total lead according to SW-846 Methods 6010B (Inductively Coupled Plasma-Mass Spectrometry). Data validation procedures follow the criteria in the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010) and Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses. Results of the data validation effort are summarized in the attached narrative summary. Data qualifiers (as appropriate) have been added to the corresponding EDD file.

Data Qualifier Definitions:

- | | |
|----|--|
| B | The analyte was detected substantially above the level reported in laboratory or field blanks (EPA Region III). |
| U | The analyte was analyzed for, but was not detected at or above the adjusted quantitation limit for the sample and method. |
| J | The analyte was positively identified, but the associated numerical value is an estimated concentration of the analyte in the sample based on its associated quality measures. |
| NJ | The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.” The associated numerical value is the analyte’s approximate concentration. |
| UJ | The analyte was not detected at or above the adjusted quantitation limit. However, the reported quantitation limit is approximate. |
| R | The sample results are rejected and the data are unusable because certain criteria were not met. The presence or absence of the analyte cannot be verified. |

Data Completeness: The data deliverables pertaining to 21 soil samples were complete. The samples were analyzed in three analytical batches.

Chain of Custody: The chain of custody documentation was complete. No qualifiers were applied.

Holding Times: The samples were digested (following 3050) and analyzed within the required holding times; no qualifiers were applied.

Initial and Continuing Calibration Verification: The frequency of the ICV and CCV runs were met and their values were within control limits (90-110 % recovery) for the samples; no qualifiers were applied.

Initial and Continuing Calibration Blanks: The frequency of the initial calibration blank and the continuing calibration blanks were met. The ICB and CCB values associated with the reported data were within control limits for the samples. No qualifiers were applied.

Blanks: The three prep blank samples reported the target compound as not detected. No qualifiers were applied.

ICP Interference Check Sample: ICSs were analyzed at the beginning and end of each run. All results were within control limits ($\pm 20\%$ of the mean value); no qualifiers were applied.

Field Duplicates: Two field duplicate soil samples were collected and analyzed in this SDG. Review of the results between the **sample** and its *duplicate* indicates a relatively good correlation (i.e., RPD < 20 %) for the two field duplicates. No qualifiers were applied.

Sample	<i>Duplicate</i>	Correlation
C4-S-4-6	<i>Duplicate 1</i>	Good correlation
L2-S-6-8	<i>DUP-2</i>	Good correlation

Laboratory Duplicates: The frequency of duplicate analyses was met and the relative percent differences were within control limits (RPD < 20 %) for two of the three duplicate samples. The RPD for the other duplicate sample was greater than 20%, most likely due to variability resulting from the sub-sampling of non-homogeneous soil samples. For technical review (versus method review), the guidelines allow for less restrictive criteria; therefore, no qualifiers were applied.

Matrix Spike The percent recoveries were within control limits for the three site-specific MS soil samples. No qualifiers were applied.

Laboratory Control Sample: The percent recoveries were within control limits (%REC between 80% to 120%) for the three LCS samples; no qualifiers were applied.

ICP Serial Dilution: Serial dilution analysis (for compounds detected >50X the MDL) was not applicable; thus, no qualifiers were applied.

OVERALL ASSESSMENT OF TOTAL LEAD SOIL SAMPLES: The checked data were within acceptable quantitation and qualification limits. No major issues were encountered during the soil sample data validation effort and no qualifiers were applied.

QA/QA ASSESSMENT OF 8260B VOC DATA

Soil Samples

**911th Air Force Reserve Station, Pittsburgh, PA
Pace Analytical Sample Delivery Group Nos. 3066909 and 3067122
(April 02 to 11, 2012 – Soil Samples)**

This data validation summary pertains to soil samples, which were collected in April 2012 at the 911th Airlift Wing T-Ramp. The samples were analyzed according to SW-846 Method 8260B for volatile organic compounds (VOC) by Gas Chromatography/Mass Spectrometry (GC/MS). Data validation procedures follow the criteria in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) and Region III Modifications to National Functional Guidelines for Organic Data Review Multi-Media, Multi-Concentration (OLMO1.0-OLMO1.9; September 1994). Results of the data validation effort are summarized in the attached narrative summary. Data qualifiers (as appropriate) have been added to the corresponding EDD file.

Data Qualifier Definitions:

- B The analyte was detected substantially above the level reported in laboratory or field blanks (EPA Region III).
- U The analyte was analyzed for, but was not detected at or above the adjusted quantitation limit for the sample and method.
- J The analyte was positively identified, but the associated numerical value is an estimated concentration of the analyte in the sample based on its associated quality measures.
- NJ The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.” The associated numerical value is the analyte’s approximate concentration.
- UJ The analyte was not detected at or above the adjusted quantitation limit. However, the reported quantitation limit is approximate.
- R The sample results are rejected and the data are unusable because certain criteria were not met. The presence or absence of the analyte cannot be verified.

Data Completeness: The data deliverables pertaining to 21 soil samples were complete. The samples were analyzed in two analytical batches.

Chain of Custody: The chain of custody documentation was complete. No qualifiers were applied.

Holding Times: The samples were analyzed within the required holding times; no qualifiers were applied.

GC/MS Instrument Performance Check: Bromofluorobenzene (BFB) was run at least every 12 hours of analysis and all BFB ion abundance criteria were within control limits. No qualifiers were applied.

Initial Calibration: Target compounds had relative response factors (RRF) above the allowable minimum (0.05). The percent relative standard deviations (%RSD) of the RRFs were below the allowable maximum (30%) for the target compounds. No qualifiers were applied.

Continuing Calibration: The target compounds had % Ds below the allowable maximum (25%). No qualifiers were applied.

Blanks: The two method blank samples (42978 and 429948) reported all target compounds as not detected, with the exception of acetone and methylene chloride. **Qualifiers** - Positive detects for acetone and methylene chloride that are less than the action level (10x the greatest blank concentration) are flagged (B) when detected in the associated samples. No action is taken if the compound is not detected in the associated samples, or if the compound is detected above the action level. Qualifiers were applied.

System Monitoring (Surrogate Recovery): All surrogate recoveries for 1,2-dichloroethane, toluene-d8, and 4-bromofluorobenzene were within control and advisory limits. No qualifiers were applied.

Field Duplicates: Two field duplicate soil samples were collected and analyzed in this SDG. Although very few compounds were detected, review of the results between the **sample** and its *duplicate* indicates a relatively good correlation for the two field duplicates. No qualifiers were applied.

Sample	<i>Duplicate</i>	Correlation
C4-S-4-6	<i>Duplicate 1</i>	Good correlation
L2-S-6-8	<i>DUP-2</i>	Good correlation

Matrix Spike/MS Duplicate A site-specific matrix spike/matrix spike duplicate analysis was not performed because of insufficient sample volume. Because no action/qualifier is taken on MS/MSD data alone (if the associated LCS samples are within the control limits), no qualifiers were applied.

Laboratory Control Sample: The percent recoveries were within control limits for one of the two LCS samples (429279). For the other LCS sample (429949), the percent recoveries were within control limits, with the exception of chloroethane (high recovery). Positive results for chloroethane in the corresponding samples are considered estimates and flagged (J); qualification of non-detects is not necessary. No qualifiers were applied.

Internal Standard Area Summary: All internal standard areas and retention times for chlorobenzene-d5, 1,4-difluorobenzene, and chlorobenzene-d5 were within control limits. No qualifiers were applied.

Compound Identification: Positive-result compounds met RRT and ion spectra criteria. No qualifiers were applied.

Quantitation/Reporting Limits: Compounds that are qualitatively identified at concentrations below their respective Contract Required Quantitation Limits (i.e., reporting limits) are reported with a (J) qualifier to indicate that they are quantitative estimates.

OVERALL ASSESSMENT OF VOC SOIL SAMPLES: The checked data were within acceptable quantitation and qualification limits. Minor issues were identified and qualifiers added; no major issues, however, were encountered during the data validation effort.

Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012

Appendix J: General Conformity

As required by *Air Force Instruction 32-7040*, *32 CFR Part 989.30 Air Quality*, and *Section 176(c) of the Clean Air Act Amendments of 1990*, *42 U.S.C. 7506(c)*, an air quality conformity evaluation must be performed when a Federal action generates air pollutants above *de minimis* thresholds in a region that has been designated a non-attainment or maintenance area for one or more NAAQS. This *Federal Conformity Final Rule (40 CFR Parts 51 and 93)* specifies criteria or requirements for conformity determinations for Federal projects.

As stated in Section 4.5 of this EA/EBS, Allegheny County is in nonattainment for **ozone** and **PM_{2.5}**. Therefore, this conformity evaluation shall determine if the emissions generated from the proposed action will impact **ozone** and **PM_{2.5}**.

If the emissions generated from the proposed action will not increase or if an increase of emissions is clearly *de minimis*, then the action may be classified as exempt as defined by USEPA in *40 CFR Part 93.153(c)(2)*, as follows:

...(x) Actions, such as the following, with respect to existing structures, properties, facilities and lands where future activities conducted will be similar in scope and operation to activities currently being conducted at the existing structures, properties, facilities, and lands; for example, relocation of personnel, disposition of federally-owned existing structures, properties, facilities, and lands, rent subsidies, operation and maintenance cost subsidies, the exercise of receivership or conservatorship authority, assistance in purchasing structures, and the production of coins and currency.

(xiii) Routine operation of facilities, mobile assets and equipment.

(xiv) Transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of the transfer.

(xix) Actions (or portions thereof) associated with transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly after a specific, reasonable condition is met, such as promptly after the land is certified as meeting the requirements of CERCLA, and where the Federal agency does not retain continuing authority to control emissions associated with the lands, facilities, title, or real properties.

Therefore, as the proposed action meets one or more of these exemptions, resulting in air emissions below the *de minimis* thresholds for criteria air pollutants in the region that are not regionally significant, the proposed project is presumed to conform to the SIP and no further Conformity Determination is required. Thus, neither the implementation of the proposed action nor the no action alternative will pose a significant air quality impact.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix K: IICEP Contacts, Letters and Comments

IICEP CONTACTS

U.S. Air Force, 911th Airlift Wing/CONF/LGC

Mr. Daniel Lucci
Chief, Contracting Officer
911th Airlift Wing/CONF/LGC
Pittsburgh International Airport Air Reserve Station
Coraopolis, PA 15108
Phone (412) 474-8119

Ms. Anne Goodman
Contract Specialist
911th Airlift Wing/CONF/LGC
Pittsburgh International Airport Air Reserve Station
Coraopolis, PA 15108
Phone (412) 474-8126

U.S. Air Force, 911th Airlift Wing/MSG/CEV

Mr. Joseph B. Matis
Environmental Flight Chief
911th Airlift Wing/MSG/CEV
Pittsburgh International Airport Air Reserve Station
Coraopolis, PA 15108
Phone (412) 474-8749

U.S. Air Force, 911th Airlift Wing/MSG/CEVE

Mr. Frank Sniezek
Environmental Engineer
911 Environmental Flight Contact
911th Airlift Wing/MSG/CEVE
Pittsburgh International Airport Air Reserve Station
Coraopolis, PA 15108
Phone (412) 474-8428

Ms. Felicia Johnson
NEPA Manager
Directorate of Installations & Mission Support
HQ AFRC/A7PP Robins AFB, GA 31098
Phone (478) 327-1995

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix K: IICEP Contacts, Letters and Comments

Allegheny County Airport Authority

Mr. Bradley D. Penrod, A.A.E.
Chief Executive Officer
Allegheny County Airport Authority
Pittsburgh International Airport
Landside Terminal, 4th Floor Mezzanine
PO Box 12370
Pittsburgh, PA 15231
Phone (412) 472-3500

Mr. Richard C. Belotti
Director, Planning and Environmental Affairs
Allegheny County Airport Authority
Pittsburgh International Airport
Landside Terminal, 4th Floor Mezzanine
PO Box 12370
Pittsburgh, PA 15231
Phone (412) 472-3545

Mr. Kevin A. Gurchak
Manager of Environmental Compliance
Allegheny County Airport Authority
Pittsburgh International Airport
Landside Terminal, 4th Floor Mezzanine
PO Box 12370
Pittsburgh, PA 15231
Phone (412) 472-3575

FEDERAL AGENCIES

Ms. Lori K. Pagnanelli - Manager
FAA, Airports Division – Eastern Region
3905 Hartzdale Drive, Suite 508
Camp Hill, PA 17011

Mr. Shawn M. Garvin - Regional Administrator
U.S. EPA Region 3 Regional Office
1650 Arch Street
Philadelphia, PA 19103-2029
(800) 438-2474

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix K: IICEP Contacts, Letters and Comments

District Engineer, Colonel William H. Graham
U.S. Army Corps of Engineers, Pittsburgh District
2200 William S. Moorhead Federal Building
1000 Liberty Avenue
Pittsburgh, PA 15222-4186
(412) 395-7500

Mr. Clint Riley, Project Leader/Supervisor
U.S. Fish & Wildlife Service
Pennsylvania Field Office
315 South Allen Street, Suite 322
State College, PA 16801
(814) 234-4090

STATE AGENCIES

Ms. Susan Malone - Director, Southwest Region
Pennsylvania Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222
(412) 442-4000

Mr. Thomas Qualters, Regional Law Enforcement Manager
Pennsylvania Fish and Boat Commission
Southwest Region Office
236 Lake Road
Somerset, PA 15501
(814) 445-8974

Ms. Tracey Librandi Mumma
PA Game Commission, Division of Environmental Planning & Habitat Protection
Bureau of Wildlife Habitat Management
2001 Elmerton Ave
Harrisburg, PA 17110-9797
(717) 783-5957

Mr. Doug McLearen - Division Chief, Archaeology and Protection
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, Second Floor
400 North Street
Harrisburg, PA 17120-0093
(717) 783-8946

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix K: IICEP Contacts, Letters and Comments

LOCAL AGENCIES

Ms. Jennifer M. Liptak
Acting County Manager, Allegheny County
Allegheny County Courthouse, RM 119
436 Grant Street
Pittsburgh, PA 15219
(412) 350-5300

Ms. Jeanne Creese
Township Manager, Moon Township
Moon Township Municipal Building
1000 Beaver Grade Road
Moon Township, PA 15108
(412) 262-5000

Mr. Thomas J. Gallant
Chairperson, Findlay Township Supervisors
1271 Route 30
P.O. Box W
Clinton, PA 15026
(724) 695-0500

MEDIA

Pittsburgh Tribune Review

Pittsburgh Post Gazette

PUBLIC COMMENT (provide copies at following locations for public review)

911th Visitors Center Facility

Moon Township Municipal Building

Findlay Township Municipal Building

Moon Township Public Library

Appendix K: IICEP Contacts, Letters and Comments

Mr. Richard C. Belotti
Director, Planning and Environmental Affairs
Allegheny County Airport Authority
Pittsburgh International Airport
Landside Terminal, 4th Floor Mezzanine
PO Box 12370
Pittsburgh, PA 15231
Phone (412) 472-3545

Mr. Edward S. Gabsewics
FAA, Airports Division
3905 Hartzdale Drive, Suite 508
Camp Hill, PA 17011

Mr. Shawn M. Garvin - Regional Administrator
U.S. EPA Region 3 Regional Office
1650 Arch Street
Philadelphia, PA 19103-2029
(800) 438-2474

Colonel William Graham, District Engineer
U.S. Army Corps of Engineers, Pittsburgh District
2200 William S. Moorhead Federal Building
1000 Liberty Avenue
Pittsburgh, PA 15222-4186
(412) 395-7500

Mr. Clint Riley, Project Leader/Supervisor
U.S. Fish & Wildlife Service
Pennsylvania Field Office
315 South Allen Street, Suite 322
State College, PA 16801
(814) 234-4090

Ms. Susan Malone - Director, Southwest Region
Pennsylvania Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222
(412) 442-4000

Mr. Thomas Qualters, Regional Law Enforcement Manager
Pennsylvania Fish and Boat Commission
Southwest Region Office
236 Lake Road
Somerset, PA 15501
(814) 445-8974

Appendix K: IICEP Contacts, Letters and Comments

Mr. Pat Anderson - Director
PA Game Commission, Southwest Region
4820 Route 711
Bolivar, PA 15923
(724) 238-9523

Mr. Doug McLearen - Division Chief, Archaeology and Protection
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, Second Floor
400 North Street
Harrisburg, PA 17120-0093
(717) 783-8946

Mr. James M. Flynn, Jr.
County Manager, Allegheny County
Allegheny County Courthouse, RM 119
436 Grant Street
Pittsburgh, PA 15219
(412) 350-5300

Ms. Jeanne Creese
Township Manager, Moon Township
Moon Township Municipal Building
1000 Beaver Grade Road
Moon Township, PA 15108
(412) 262-5000

Mr. Thomas J. Gallant
Chairperson, Findlay Township Supervisors
1271 Route 30
P.O. Box W
Clinton, PA 15026
(724) 695-0500



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED
February 2, 2012

Mr. Richard C. Belotti
Director, Planning and Environmental Affairs
Allegheny County Airport Authority
Pittsburgh International Airport
Landside Terminal, 4th Floor Mezzanine
PO Box 12370
Pittsburgh, PA 15231

Dear Mr. Belotti:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "Description of Proposed Action and Alternatives" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Sniezek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



7010 1870 0003 1995 5552

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
<i>(Domestic Mail Only; No Insurance Coverage Provided)</i>	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage	\$1.64
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$7.39
Postmark Here	
Sent To: <i>Richard C. Belotti</i>	
Street, Apt. No. or PO Box No.: <i>AC AA Landside Terminal</i>	
City, State, ZIP+4: <i>Pittsburgh, PA 15231</i>	
PS Form 3800, August 2006 See Reverse for Instructions	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none">■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.■ Print your name and address on the reverse so that we can return the card to you.■ Attach this card to the back of the mailpiece, or on the front if space permits.	<p>A. Signature <i>[Signature]</i> <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <i>[Signature]</i> C. Date of Delivery <i>[Blank]</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to: <i>Mr. Richard C. Belotti</i> <i>Allegheny County Airport Auth.</i> <i>Pittsburgh International Airport</i> <i>Landside Terminal</i> <i>4th Floor Mezz.</i> <i>Pittsburgh, PA 15231</i></p>	<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label)</p>	

7010 1870 0003 1995 5552



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED

February 2, 2012

Mr. Edward S. Gabsewics
FAA, Airports Division
3905 Hartzdale Drive, Suite 508
Camp Hill, PA 17011

Dear Mr. Gabsewics:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "Description of Proposed Action and Alternatives" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Sniezek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



7010 1870 0003 1995 5569

U.S. Postal ServiceTM CERTIFIED MAILTM RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage	\$ 1.64
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.39
Postmark Here	
Sent To <i>Mr. Edward Galusiewicz</i> Street, Apt. No., P.O. Box No. <i>3905 Hartzdale Drive</i> City, State, ZIP+4 <i>Camp Hill, PA 17011</i>	
PS Form 3800, August 2006 See Reverse for Instructions	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature <i>[Signature]</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee B. Received by (Printed Name) <i>Edward S. Galusiewicz</i> C. Date of Delivery <i>2/6/12</i>
1. Article Addressed to: <i>Mr. Edward Galusiewicz</i> <i>FAA, Airports Division</i> <i>3905 Hartzdale Drive</i> <i>Suite 508</i> <i>Camp Hill, PA 17011</i>	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No
2. Article Number (Transfer from service)	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
7010 1870 0003 1995 5569	



FAA
Airports Division

Eastern Region

RECEIVED

FEB 27 2012

3905 Hartzdale Drive
Suite 508
Camp Hill, PA 17011
(717) 730-2830

CDM Smith Pittsburgh, PA

February 24, 2012

Daniel J. DePra, P.E., BCEE
CDM Smith Inc.
503 Martindale Street
Suite 500
Pittsburgh, PA 15212-0301


Dear Mr. DePra:

This office has received your February 2, 2012 letter requesting the Federal Aviation Administration (FAA) review and comment on the "*FINAL Description of Proposed Action and Alternatives (DOPAA) for the Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority*" dated January 25, 2012.

The FAA is responsible for reviewing any proposed action on the Pittsburgh International Airport that results in a revision to the approved Airport Layout Plan (ALP). Any such change should be requested by the airport sponsor (Allegheny County Airport Authority). This office will provide comments on the *Description of Proposed Action and Alternatives*, and on the Environmental Assessment directly to the airport. Once the airport sponsor has had an opportunity to review our comments, they can discuss them directly with the Air Force Reserve Command. Our office is happy to participate in these discussions, as needed. Every effort will be made to ensure comments are received within the requested 30-day review timeframe.

Should you have any questions, please contact Sue McDonald, Harrisburg Airports District Office, Environmental Protection Specialist, at (717) 730-2841.

Sincerely,



Lori K. Pagnanelli
Manager

cc: Brad Penrod

Pittsburgh International Airport

Landside Terminal, 4th Floor Mezz.

PO Box 12370

Pittsburgh, PA 15231-0370

p: 412.472.3500

February 23, 2012

Ms. Lori Pagnanelli
Federal Aviation Administration
Airports District Office
3905 Hartzdale Drive, Suite 508
Camp Hill, PA 17011

SUBJECT: AIR FORCE RESERVE COMMAND – 911TH AIRLIFT WING
MODIFICATION TO EXISTING LEASE AGREEMENT

Dear Ms. Pagnanelli:

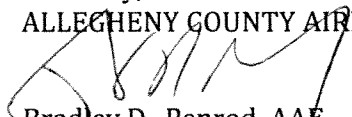
Please be informed that the Allegheny County Airport Authority (ACAA) and the Air Force Reserve Command (AFRC)/911th Airlift Wing are currently working to expand the AFRC leased area at Pittsburgh International Airport to include approximately 26 acres of ramp area that is currently leased to the AFRC under a separate Memorandum of Agreement (MOA). The additional ramp space is needed by the AFRC for parking C-130 aircraft and, has been leased on a short-term basis to the AFRC since 1993 under the MOA. The MOA has been renewed several times since 1993 and will expire on December 31, 2012.

Prior to executing the lease agreement with ACAA, the 911th Airlift Wing must conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude and extent of any environmental contamination and environmental impacts associated with the lease of this additional 26 acres. The ACAA fully supports this endeavor and has provided staff to assist the AFRC with preparing the necessary documentation.

As part of this effort, the AFRC will need to coordinate with the Federal Aviation Administration Airports District Office. We ask for your cooperation in providing the necessary reviews and comments relating to the EA and the EBS. We also request that your coordination be directly through the AFRC's project manager Mr. Joseph B. Matis, Environmental Flight Chief or their consultant Mr. Dan DePra, Senior Project Manager of CDM-SMITH. Contact information is attached to this letter.

Should you have any additional questions, please do not hesitate to contact Mr. Richard C. Belotti, Director of Planning and Environmental Affairs at 412-472-3545.

Sincerely,
ALLEGHENY COUNTY AIRPORT AUTHORITY



Bradley D. Penrod, AAE
Executive Director/CEO



BDP/RCB/dlc

Attachment

cc: Eric Ruprecht, ACAA
Joseph B. Matis, AFRC

bcc: Stephanie Saracco, Dan DePra

AIR FORCE RESERVE COMMAND – 911TH AIRLIFT WING
MODIFICATION TO EXISTING LEASE AGREEMENT

Joseph B. Matis
Environmental Flight Chief
911th Airlift Wing/CONF/LGC
Pittsburgh International Airport Air Reserve Station
Coraopolis, PA 15108
Phone (412) 474-8749

Daniel J. DePra, PE BCEE
Deputy Project Manager
CDM Smith Inc
503 Martindale Street, Suite 500
Pittsburgh, PA 15212
Phone (412) 201-5500



Shipment Receipt Address Information

Ship to:	Ship from:
Lori Pagnanelli	Debra Chermer
Federal Aviation Administration	
3905 HARTZDALE DR	Pittsburgh International
STE 508	Airport
HARRISBURG	Landside Terminal 4th Fl
AIRPORTS DISTRICT	Mezz
OFFICE	
CAMP HILL, PA	Pittsburgh, PA
170117837	15231
US	US
717-730-2832	4124723546

Shipping Information

Tracking number: 798093483632
 Ship date: 02/23/2012
 Estimated shipping charges: 10.78

Package Information

Service type: Standard Overnight
 Package type: FedEx Envelope
 Number of packages: 1
 Total weight: 1LBS
 Declared value: 0.00USD
 Special Services:
 Pickup/Drop-off: Use an already scheduled pickup at my location

Billing Information

Bill transportation to: MyAccount-079
 Your reference: RCB/911
 P.O. no.:
 Invoice no.:
 Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

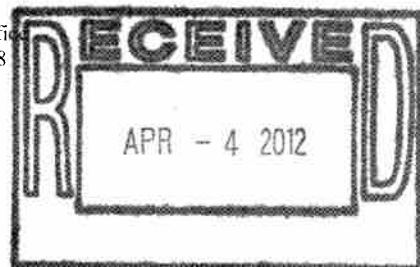
FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits. Consult the applicable FedEx Service Guide for details. The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable [FedEx Service Guide](#) or the FedEx Rate Sheets for details on how shipping charges are calculated.



**U. S. Department
Of Transportation**

**Federal Aviation
Administration**

Harrisburg Airports District Office
3905 Hartzdale Drive, Suite 508
Camp Hill, PA 17011
717-730-2839
717-730-2838 (fax)



March 29, 2012

Brad Penrod
Allegheny County Airport Authority
Pittsburgh International Airport
Landside Terminal, 4th Floor Mezz.
P.O. Box 12370
Pittsburgh, PA 15231-0307

Dear Mr. Penrod:

This office received a letter from CDM Smith Inc. requesting the Harrisburg Airports District Office (ADO) review and comment on the "*FINAL Description of Proposed Action and Alternatives (DOPAA) for the Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority*," dated January 25, 2012. It is our understanding that this document was prepared for, and represents the intentions of, the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) of the Pittsburgh International Airport Air Reserve Station. Since the proposed action results in a request for a revision to the Airport Layout Plan (ALP), the airport sponsor should take the lead in contacting the ADO.

The stated intent of the document is to address the requirements for both an Environmental Assessment (EA) and an Environmental Baseline Survey (EBS) for the proposed leasing of approximately 26 acres of dedicated airport property. Since an EBS is not an action typically conducted by the FAA, the majority of our comments are in reference to the EA. There are also some general comments and issues of concern that will need to be addressed between the Allegheny County Airport Authority (ACAA) and the ADO.

General Comments for the ACAA

1. The FAA must have assurance that ACAA is in agreement with the proposed action. A letter from ACAA stating its intent to lease land to the AFRC, including the rationale and conditions of the lease must be provided to the ADO.
2. The ADO is requesting copies of the 1993 Memorandum of Agreement (MOA) and amendments, and any lease agreements between ACAA and AFRC or 911 AW that are currently in place.
3. FAA Airport Compliance Manual, 5190.6B, requires an airport be as self-sustaining as possible. While the ADO recognizes that 911 AW is an aeronautical military unit and,

therefore, not subject to Fair Market Value lease requirements, or at the discretion of ARCC, can be charge nominal, the ADO recommends that reasonable fees or services in-lieu of fees be terms of any lease agreement.

4. The ADO recommends that should a lease be entered into with the AFRC for use of airport property that the lease be a maximum of 20 years. If the parties desire the lease to be longer term, then a maximum of two (2) ten-year renewals can be considered.
5. If the AFRC is going to assume responsibility for repair and maintenance of the leased property, the lease should specifically address responsibility and liability for any potential environmental impacts.
6. The ADO requests an opportunity to review the draft lease agreement prior to execution.
7. According to the DOPAA report, the AFRC intends on conducting 27 soil borings, including nine groundwater wells, to determine the nature, magnitude and extent of any environmental contamination on the subject property. Based on the history of the property, there is potential for hazardous material. The ADO strongly recommends that prior to any work on the subject property, legally-binding agreements be in place specifying who will be responsible for any permits, cleanup, disposal of material or fines, etc. that could be associated with the Phase II Environmental Baseline Survey.
8. Once the lease is executed, the airport's ALP will have to be updated to reflect the change. Since the AFRC appears to use a different process and standard for their environmental documents, the FAA will require ACAA conduct its own environmental analysis. Information obtained by the AFRC in their EA can be accepted and used by ACAA, but the environmental analysis for FAA must follow the procedures and standards outlined in FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*, and FAA Order 5050.4B, *National Environmental Policy Act Implementing Instructions for Airport Actions*.

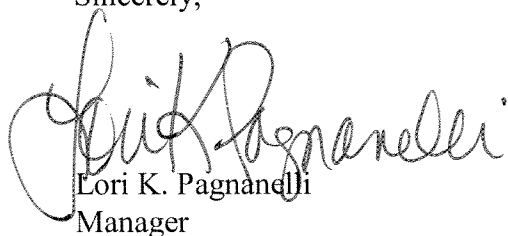
Comments on the DOPAA/EA

1. The methodology described in report for establishing the EBS appears to be adequate. The AFRC is reminded to coordinate closely with the ACAA prior to drilling to ensure all equipment is reviewed through the airspace process in accordance with FAA safety requirements.
2. The FAA requests copies of the EBS.
3. Please attach a letter or meeting minutes demonstrating that the ACAA is in support of this project.
4. The Purpose and Need for the proposed action is not clearly stated. In the Executive Summary (page 4), the reason for the proposed lease is to replace the existing MOA with a more secure and defined lease agreement in order to ensure continued use and maintenance of the T-Ramp property. In Section 1.2 (page 7), it states the property is needed to provide for parking during construction activity and for additional visiting military aircraft. In Section 3.1 (page 24), it states the action would, "provide the 911 AW with a contiguous, easily accessible and secure leased area required for 911 AW operations."
5. The Alternative Section should consider all reasonable alternatives, including such options as modification of existing MOA, purchase of land, and use of other airports.

6. Section 3.3.1, Legal Description of Property to be Transferred, should be, "Legal Description of Property to be Leased."
7. The EA should address all environmental resources that could potentially be impacted. For example, will the increase in the use of T-Ramp property shift or alter the noise contours; result in any impacts to storm water run-off or air quality; or change the number or type of aircraft.
8. The ADO would appreciate the opportunity to review the final EA and if the determination warrants it, the Finding of No Significant Impacts.

Should you have any question, please contact Sue McDonald, HARADO Environmental Protection Specialist, at (717) 730-2841 or by e-mail at susan.mcdonald@faa.gov.

Sincerely,



Lori K. Pagnanelli
Manager

cc: Mahendra Raghubeer
Oscar Sanchez

DePra, Daniel

From: Belotti, Rich [RBelotti@PITAIRPORT.com]
Sent: Wednesday, August 15, 2012 12:29 PM
To: Lori.Pagnanelli@faa.gov
Cc: Susan.McDonald@FAA.GOV; Saracco, Stephanie; Penrod, Brad; DePra, Daniel; Ruprecht, Eric; Buncher, Eric; Gurchak, Kevin A
Subject: RE: T-Ramp Prelim Final EA/EBS and Draft FONSI - PDF copy for FAA

Lori:

Thank you very much for your timely review of the T-Ramp Preliminary Final EA/EBS and Draft FONSI.

Eric Ruprecht of our staff will make certain that the conditions of your July 10, 2012 letter are complied with.

Richard

Please consider the environment before printing this e-mail.

-----Original Message-----

From: Lori.Pagnanelli@faa.gov [mailto:Lori.Pagnanelli@faa.gov]
Sent: Wednesday, August 15, 2012 12:17 PM
To: Penrod, Brad
Cc: Susan.McDonald@FAA.GOV; Belotti, Rich; Saracco, Stephanie
Subject: Re: T-Ramp Prelim Final EA/EBS and Draft FONSI - PDF copy for FAA

Brad - We have reviewed your submission of the Final EA and FONSI for the T-Ramp project at PIT, and have no comments. If/when the airport moves forward with the lease, we ask that you please keep our office involved and that you consider the recommendations as specified in my July 10, 2012 letter to you. Once the lease is in place, we will need to make an environmental finding by adopting the results of the EA and preparing an administrative CATEX for the lease of land.

Please let me know if you have any questions. Thanks.

Lori K. Pagnanelli
Manager, Harrisburg Airports District Office FAA Eastern Region
717-730-2831 (ph)
717-730-2838 (fax)

From: "Belotti, Rich" <RBelotti@PITAIRPORT.com>
AEA-HAR-ADO, Harrisburg, PA
To: Lori Pagnanelli/AEA/FAA@FAA,
Cc: Susan McDonald/AEA/FAA@FAA, "Penrod, Brad"
<BPenrod@PITAIRPORT.com>, "Saracco, Stephanie"
<SSaracco@PITAIRPORT.com>
Date: 08/13/2012 04:05 PM
Subject: FW: T-Ramp Prelim Final EA/EBS and Draft FONSI - PDF copy for
FAA

Lori:

For your follow-up review and comment, attached is the Final EA and FONSI for the T-Ramp project at the PIT that CDM Smith conducted on behalf of the 911th Airlift Wing.

Should you have any questions, please contact me. I apologize for not getting this out last week.

Richard

Richard C. Belotti
Director of Planning and Environmental Affairs
RBelotti@pitairport.com

p: 412-472-3545

f: 412-472-3544

(Embedded image moved to file:
pic22888.jpg)

<http://www.pitairport.com/images/swoosh-topright.jpg>

(Embedded image moved to file: pic19156.jpg)

<http://www.pitairport.com/images/swoosh-bottom.jpg>

Allegheny County Airport Authority
Pittsburgh International Airport
Landside Terminal, 4th Floor Mezz.
PO Box 12370
Pittsburgh, PA 15231-0370

FlyPittsburgh.com

This email may contain
confidential and/or privileged
information for the sole use of
the intended recipient. Any
review or distribution by others

is strictly prohibited. If you have received this email in error, please contact the sender and delete all copies. Opinions, conclusions or other information expressed or contained in this email are not given or endorsed by the sender unless otherwise affirmed independently by the sender.

P Please consider the environment before printing this e-mail.

From: DePra, Daniel [mailto:DePraDJ@cdmsmith.com]

Sent: Thursday, August 02, 2012 10:32 AM

To: Belotti, Rich; Gurchak, Kevin A

Cc: Sickles, Matthew; SNIEZEK, FRANK M CIV USAF AFRC 911 MSG/CEVE; MATIS, JOSEPH B CIV USAF AFRC 911 CES/CEV

Subject: T-Ramp Prelim Final EA/EBS and Draft FONSI - PDF copy for FAA

Richard:

In the FAA's letter to Mr. Penrod dated 3/29/2012, Ms. Lori Pagnanelli requested to review the Final EA and FONSI for the T-Ramp project at the Pittsburgh IA PARS that CDM Smith conducted on behalf of the 911th Airlift Wing. Please find attached the PDF of the Prelim. Final EA/EBS and FONSI for you to email to them -- I thought that you'd prefer to email it to them, rather than me. I did not include Appendices E - J because of the large size of the attachment. However, if they would like to see the full document, I can mail them a hardcopy and/or CD in addition to the attached PDF.

This Prelim Final EA/EBS and draft FONSI will be available for public review starting tomorrow through 9/2/2012 and the notice of availability will be published in the Pittsburgh Post Gazette and Pittsburgh Tribune Review on 8/3/2012, 8/4/2012, 8/10/2012 and 8/11/2012.

Thanks,

Dan

Daniel J. DePra, P.E., BCEE
Senior Project Manager

CDM Smith | 503 Martindale Street | Suite 500 | Pittsburgh, PA 15212 |
Office: (412) 201-5500 | Direct: (412) 208-2427 | Fax: (412) 231-0301 |
Cell: (412) 874-1051 | depradj@cdmsmith.com | cdmsmith.com

This e-mail has been scanned by MCI Managed Email Content Service, using Skeptic(tm) technology powered by MessageLabs. For more information on MCI's Managed Email Content Service, visit <http://www.mci.com>.

This e-mail has been scanned by Verizon Managed Email Content Service, using Skeptic(tm) technology powered by MessageLabs. For more information on Verizon's Managed Email Content Service, visit <http://www.verizonbusiness.com>.

[attachment
"FA6712-10-D-0001-0004_Report_Prelim Final EA-EBS_2012-08-03_only thru Appx D.pdf" deleted
by Susan McDonald/AEA/FAA]

This e-mail has been scanned by Verizon Managed Email Content Service, using Skeptic(tm) technology powered by MessageLabs. For more information on Verizon's Managed Email Content Service, visit <http://www.verizonbusiness.com>.

This e-mail has been scanned by Verizon Managed Email Content Service, using Skeptic(tm) technology powered by MessageLabs. For more information on Verizon's Managed Email Content Service, visit <http://www.verizonbusiness.com>.



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED

February 2, 2012

Mr. Shawn M. Garvin - Regional Administrator
U.S. EPA Region 3 Regional Office
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Mr. Garvin:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "*Description of Proposed Action and Alternatives*" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Sniezek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



7010 1870 0003 1995 5576

U.S. Postal ServiceTM	
CERTIFIED MAILTM RECEIPT	
<i>(Domestic Mail Only; No Insurance Coverage Provided)</i>	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage	\$ 1.64
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.39
Postmark Here	
Sent To <i>Shawn M. Marin</i>	
Street, Apt. No., or PO Box No. <i>USEPA, 1650 Arch St</i>	
City, State, ZIP+4 [®] <i>Phila, PA 19103</i>	
PS Form 3800, August 2006 See Reverse for Instructions	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none">■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.■ Print your name and address on the reverse so that we can return the card to you.■ Attach this card to the back of the mailpiece, or on the front if space permits.	A. Signature X U.S. EPA <input type="checkbox"/> Agent <input type="checkbox"/> Addressee
1. Article Addressed to: <i>Mr. Shawn M. Marin</i> <i>U.S. EPA Region 3</i> <i>1650 Arch Street</i> <i>Philadelphia, PA</i> <i>19103-2029</i>	B. Received by (Printed Name) <i>1650 ARCH STREET PHILADELPHIA PA 19103</i> C. Date of Delivery <i>FEB 06 2012</i>
2. Article Number (Transfer from service label) 7010 1870 0003 1995 5576	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No
	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED

February 2, 2012

Colonel William Graham, District Engineer
U.S. Army Corps of Engineers, Pittsburgh District
2200 William S. Moorhead Federal Building
1000 Liberty Avenue
Pittsburgh, PA 15222-4186

Dear Colonel Graham:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "Description of Proposed Action and Alternatives" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Sniezek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



7010 1870 0003 1995 5545

U.S. Postal ServiceTM
CERTIFIED MAIL[®] RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$ 1.64
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.39

Postmark
Here

Sent To Colonel William Graham
 Street, Apt. No.,
 or PO Box No. U.S. Army Corps of Eng.
 City, State, ZIP+4[®] Pittsburgh, PA 15222

PS Form 3800, August 2006

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Colonel William Graham
U.S. Army Corps of Eng.
2200 William S. Moorhead
Federal Bldg.
1000 Liberty Avenue
Pittsburgh, PA 15222

2. Article Number

(Transfer from service label)

7010 1870 0003 1995 5545

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

Harry S. [Signature]

☐ Agent

☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

2/3/12

D. Is delivery address different from item 1? ☐ Yes

If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
PITTSBURGH DISTRICT, CORPS OF ENGINEERS
WILLIAM S. MOORHEAD FEDERAL BUILDING
1000 LIBERTY AVENUE
PITTSBURGH, PA 15222-4186

RECEIVED

MAR - 7 2012

MARCH 05 2012

Planning and Environmental Branch

CDM Smith Pittsburgh, PA

Mr. Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.
503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722

Dear Mr. DePra:

This letter is in response to your request of February 2, 2012 for participation and comments on the Description of Proposed Action and Alternatives regarding the acquisition by lease of property by the Air Force Reserve Command and 911th Airlift Wing from the Allegheny County Airport Authority at the Pittsburgh International Airport. The report was reviewed by the US Army Corps of Engineers as a part of the Intergovernmental and Interagency Coordination for Environmental Planning program.

Both chapters 1 (INTRODUCTION) and 3 (PROPOSED ACTION AND ALTERNATIVES) were found to be complete and contain all necessary material. In chapter 2 (SURVEY METHODOLOGY) great details are given in the discussion of the proposed sampling and analysis. It would be beneficial to include some information on the field equipment intended to be used for measuring field parameters, similar to that given to the sample collection equipment. These details will be useful in ensuring there are no questions during future reviews.

Thank you for the opportunity to participate in this process. If you have any questions or concerns regarding the content of this letter, please feel free to contact Mark Wozniak at (412) 395-7180 or by e-mail at mark.a.wozniak@usace.army.mil.

Sincerely,

William H. Graham
Colonel, Corps of Engineers
District Engineer



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED

February 2, 2012

Mr. Clint Riley, Project Leader/Supervisor
U.S. Fish & Wildlife Service
Pennsylvania Field Office
315 South Allen Street, Suite 322
State College, PA 16801

Dear Mr. Riley:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "*Description of Proposed Action and Alternatives*" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Snizek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



7010 1870 0003 1995 5538

U.S. Postal ServiceTM
CERTIFIED MAILTM RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$ 1.44
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.39

Postmark
Here

Sent To Clint Riley
 Street, Apt. No.,
 or PO Box No. US Fish & Wildlife
 City, State, ZIP+4 State College, PA 16801

PS Form 3800, August 2006

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Clint Riley
U.S. Fish & Wildlife Serv.
Pennsylvania Field Office
315 South Allen Street
Suite 322
State College, PA 16801

2. Article Number

(Transfer from service label)

7010 1870 0003 1995 5538

COMPLETE THIS SECTION ON DELIVERY

A. Signature

Lesal Lindsay ☐ Agent
☒ Addressee

B. Received by (Printed Name)

Lesal Lindsay

C. Date of Delivery

2/6/12

D. Is delivery address different from item 1?

If YES, enter delivery address below: ☐ Yes
☒ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

**CDM
Smith**

503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL - RETURN RECEIPT REQUIRED

February 2, 2012

Mr. Clint Riley, Project Leader/Supervisor
U.S. Fish & Wildlife Service
Pennsylvania Field Office
315 South Allen Street, Suite 322
State College, PA 16801

Dear Mr. Riley:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "Description of Proposed Action and Alternatives" (DOPAA) and solicit comments.

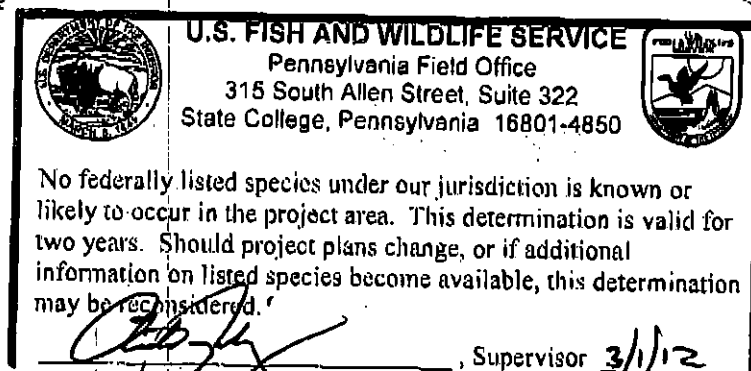
Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,



Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Sniezek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)

2012-0421
Lat/Long



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED

February 2, 2012

Ms. Susan Malone - Director, Southwest Region
Pennsylvania Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222

Dear Ms. Malone:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "Description of Proposed Action and Alternatives" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Snizek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



7010 1870 0003 1995 5521

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$ 1.44
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.39

Postmark
Here

Sent To Ms. Susan Malone
 Street, Apt. No.,
 or PO Box No. PA DEP 400 Waterfront
 City, State, ZIP+4 Pgh PA 15222

PS Form 3800, August 2006

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Ms. Susan Malone
Pennsylvania DEP
400 Waterfront Drive
Pittsburgh, PA 15222

2. Article Number

(Transfer from service label)

7010 1870 0003 1995 5521

COMPLETE THIS SECTION ON DELIVERY

A. Signature

[Signature]

☒ Agent

☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

2-3-12

D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type

- ☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED

February 2, 2012

Mr. Thomas Qualters, Regional Law Enforcement Manager
Pennsylvania Fish and Boat Commission
Southwest Region Office
236 Lake Road
Somerset, PA 15501

Dear Mr. Qualters:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "Description of Proposed Action and Alternatives" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Snizek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



7010 1870 0003 1995 5514

U.S. Postal ServiceTM
CERTIFIED MAILTM RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$1.64
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$7.39

Postmark
Here

Sent To Thomas Quarters
 Street, Apt. No.;
 or PO Box No. PA Fish & Boat Comm.
 City, State, ZIP+4[®] 236 Lake Rd, Somerset, PA 15501
 PS Form 3800, August 2005 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Thomas Quarters
Pennsylvania Fish & Boat
Commission
Southwest Regional Office
236 Lake Road
Somerset, PA 15501

2. Article Number
 (Transfer from service label)

7010 1870 0003 1995 5514

COMPLETE THIS SECTION ON DELIVERY

A. Signature
x Michele Klein ☐ Agent ☐ Addressee

B. Received by (Printed Name) Michele Klein

C. Date of Delivery 2/6/12

D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED

February 2, 2012

Mr. Pat Anderson - Director
PA Game Commission, Southwest Region
4820 Route 711
Bolivar, PA 15923

Dear Mr. Anderson:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "*Description of Proposed Action and Alternatives*" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Sniezek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



7010 1870 0003 1995 5507

U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage	\$ 1.44
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.39
Sent To: <u>Pat Anderson</u> Street, Apt. No., or PO Box No.: <u>PA Game Comm</u> City, State, ZIP+4: <u>4820 Rt 711, Bolivar, PA 15923</u>	
PS Form 3800, August 2006 See Reverse for Instructions	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature <input checked="" type="checkbox"/> <u>April L Holzer</u> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee
1. Article Addressed to: <u>Mr. Pat Anderson</u> <u>PA Game Commission</u> <u>Southwest Region</u> <u>4820 Route 711</u> <u>Bolivar, PA 15923</u>	B. Received by (Printed Name) <u>April L Holzer</u> C. Date of Delivery <u>2/3/12</u> D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No
2. Article Number (Transfer from service label)	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
4. Restricted Delivery? (Extra Fee)	<input type="checkbox"/> Yes

7010 1870 0003 1995 5507



Division of Environmental
Planning and Habitat
Protection
717-783-5957

COMMONWEALTH OF PENNSYLVANIA
Pennsylvania Game Commission
2001 ELMERTON AVENUE
HARRISBURG, PA 17110-9797

*"To manage all wild birds, mammals and their habitats
for current and future generations."*

ADMINISTRATIVE BUREAUS:

ADMINISTRATION.....717-787-5670
HUMAN RESOURCES.....717-787-7836
FISCAL MANAGEMENT.....717-787-7314
CONTRACTS AND
PROCUREMENT.....717-787-6594
LICENSING.....717-787-2084
OFFICE SERVICES.....717-787-2116
WILDLIFE MANAGEMENT.....717-787-5529
INFORMATION & EDUCATION.....717-787-6286
WILDLIFE PROTECTION.....717-783-6526
WILDLIFE HABITAT
MANAGEMENT.....717-787-6818
REAL ESTATE DIVISION.....717-787-6568
AUTOMATED TECHNOLOGY
SERVICES.....717-787-4076

www.pgc.state.pa.us

February 23, 2012

Daniel DePra
CDM Smith
503 Martindale Street
Suite 500
Pittsburgh, PA 15212

Re: Description of Proposed Action and Alternatives (DOPAA) for the Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority, Allegheny County, PA

Dear Mr. DePra,

Thank you for submitting the *Description of Proposed Action and Alternatives (DOPAA) for the Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority* to the Pennsylvania Game Commission (PGC) for review. The PGC screened this project for potential impacts to species and resources of concern under PGC responsibility, which includes birds and mammals only.

No Impact Anticipated

PNDI records indicate species or resources of concern are located in the vicinity of the project. However, based on the information you submitted concerning the nature of the project, the immediate location, and our detailed resource information, the PGC has determined that no impact is likely. Therefore, no further coordination with the PGC will be necessary for this project at this time.

This response represents the most up-to-date summary of the PNDI data files and is valid for one (1) year from the date of this letter. An absence of recorded information does not necessarily imply actual conditions on site. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered.

This finding applies to impacts to birds and mammals only. To complete your review of state and federally-listed threatened and endangered species and species of special concern, please be sure that the U.S. Fish and Wildlife Service, the PA Department of Conservation and Natural Resources, and/or the PA Fish and Boat Commission have been contacted regarding this project as directed by the online PNDI ER Tool found at www.naturalheritage.state.pa.us.

Sincerely,

Tracey Librandi Mumma

Tracey Librandi Mumma
Division of Environmental Planning & Habitat Protection
Bureau of Wildlife Habitat Management
Phone: 717-787-4250, Extension 3614
Fax: 717-787-6957
E-mail: tlibrandi@pa.gov

A PNHP Partner



TLM/tlm



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED

February 2, 2012

Mr. Doug McLearen - Division Chief, Archaeology and Protection
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, Second Floor
400 North Street
Harrisburg, PA 17120-0093

Dear Mr. McLearen:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "Description of Proposed Action and Alternatives" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Sniezek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

7010 1870 0003 1995 5491

Postage	\$ 1.64
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.39

Postmark
Here

Sent To Doug McKearen
 Street, Apt. No.,
 or PO Box No. PA Historical & Museum
 City, State, ZIP+4 400 North St, Harrisburg, PA 17120

PS Form 3800, August 2006

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Doug McKearen
PA Historical and Museum
Commission
Commonwealth Keystone
Building, Second Floor
400 North Street
Harrisburg, PA 17120

2. Article Number

(Transfer from service label)

7010 1870 0003 1995 5491

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

[Signature]

- ☐ Agent
☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

FEB 06 2012

D. Is delivery address different from item 1? ☐ Yes

If YES, enter delivery address below: ☐ No

3. Service Type

- ☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes



Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120-0093
www.phmc.state.pa.us

RECEIVED

MAR 23 2012

CDM Smith Pittsburgh, PA

March 16, 2012

Daniel J. DePra, P.E.
CDM Smith Inc.
503 Martindale Street, Suite 500
Pittsburgh, PA 15212-5722

TO EXPEDITE REVIEW USE
BHP REFERENCE NUMBER

Re: File No. ER 1985-1285-003-R
DOD: Lease Acquisition of T-Ramp Property
from Allegheny County Airport Authority, Air
Force Reserve Command & 911th Airlift Wing
Pittsburgh International Airport Air Reserve
Station, Findlay & Moon Twps., Allegheny Co.

Dear Mr. DePra:

The Bureau for Historic Preservation (the State Historic Preservation Office) has reviewed the above named project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and the regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation. These requirements include consideration of the project's potential effect upon both historic and archaeological resources.

The properties listed below, listed in or eligible for the National Register of Historic Places, are located near the project area. In our opinion, the activity described in your proposal will have no effect on such resources. Should the applicant become aware, from any source, that unidentified historic or archaeological properties are located at the project site, or that the project activities will have an effect on these properties, the Bureau for Historic Preservation should be contacted immediately.

Allegheny County Airport

If you need further information in this matter please consult Barbara Frederick at (717) 772-0921.

Sincerely,

Douglas C. McLearn, Chief
Division of Archaeology &
Protection

DCM/tmw



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED

February 2, 2012

Mr. James M. Flynn, Jr.
County Manager, Allegheny County
Allegheny County Courthouse, RM 119
436 Grant Street
Pittsburgh, PA 15219

Dear Mr. Flynn:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "Description of Proposed Action and Alternatives" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Snizek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



7010 1870 0003 1995 5484

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
<i>(Domestic Mail Only; No Insurance Coverage Provided)</i>	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage	\$ 1.64
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.39
Postmark Here	
Sent To <u>James M. Flynn</u>	
Street, Apt. No., or PO Box No. <u>Allegheny County Courthouse</u>	
City, State, ZIP+4® <u>436 Grant Street, PA 15219</u>	
PS Form 3800, August 2006 See Reverse for Instructions	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none">■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.■ Print your name and address on the reverse so that we can return the card to you.■ Attach this card to the back of the mailpiece, or on the front if space permits.	A. Signature <u>[Signature]</u> <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee
1. Article Addressed to: <u>Mr. James M. Flynn, Jr.</u> <u>Allegheny County</u> <u>Courthouse, Room 119</u> <u>436 Grant Street</u> <u>Pittsburgh, PA 15219</u>	B. Received by (Printed Name) _____ C. Date of Delivery <u>2/3/12</u>
2. Article Number (Transfer from service label)	D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, enter delivery address below: _____
PS Form 3811, February 2004	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
	Domestic Return Receipt

7010 1870 0003 1995 5484

102595-02-M-1540



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED

February 2, 2012

Ms. Jeanne Creese
Township Manager, Moon Township
Moon Township Municipal Building
1000 Beaver Grade Road
Moon Township, PA 15108

Dear Ms. Creese:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "Description of Proposed Action and Alternatives" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Sniezek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



7008 1300 0001 5416 4370

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$ 1.44
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.39

Postmark
Here

Sent To Jeanne Creese
 Street, Apt. No. or PO Box No. Moon Twp Mun. Bldg
 City, State, ZIP+4 1000 Beaver Shade Rd 15108
 PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Ms. Jeanne Creese
 Moon Twp Municipal Bldg
 1000 Beaver Shade Road
 Moon Twp, PA 15108

COMPLETE THIS SECTION ON DELIVERY

A. Signature J. Handley ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number
 (Transfer from service label)

7008 1300 0001 5416 4370

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

REGISTERED MAIL – RETURN RECEIPT REQUESTED

February 2, 2012

Mr. Thomas J. Gallant
Chairperson, Findlay Township Supervisors
1271 Route 30
P.O. Box W
Clinton, PA 15026

Dear Mr. Gallant:

The purpose of this notice is to inform you that the Air Force Reserve Command (AFRC) and 911th Airlift Wing (911 AW) Pittsburgh International Airport Air Reserve Station are pursuing the acquisition by lease of an approximately 26 acre parcel of property ("T-Ramp") owned by the Allegheny County Airport Authority (ACAA) at the Pittsburgh International Airport (PIT) in Moon and Findlay Townships, Pennsylvania.

The T-Ramp is a secured, predominantly paved area located on the PIT airfield adjacent to and north of the current 911 AW apron. The 911 AW has been using the T-Ramp property since 1993 under the conditions of a Memorandum of Agreement with the ACAA to provide space for the 911 AW to relocate C-130 aircraft for parking purposes.

Prior to executing the lease agreement with ACAA, the 911 AW is required to conduct an Environmental Assessment (EA) and a Phase II Environmental Baseline Survey (EBS) to document the nature, magnitude, and extent of any environmental contamination and environmental impacts associated with the lease of this property. The first step in this process is to develop a "Description of Proposed Action and Alternatives" (DOPAA) and solicit comments.

Therefore, in accordance with Executive Order 12372 - *Intergovernmental Review of Federal Programs*, we request your participation and solicit comments on the attached DOPAA for this proposed action. Please provide any comments within 30 days from the date of receipt of this letter directly to my attention at CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212 or via email at DePraDJ@CDMSmith.com.

Very truly yours,

Daniel J. DePra, P.E., BCEE
Senior Project Manager
CDM Smith Inc.

Enclosure (Final DOPAA)

cc: Mr. Frank Snizek (U.S. Air Force, 911th Airlift Wing/MSG/CEVE)



7008 1300 0001 5416 4387

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$ 1.64
Certified Fee	5.75
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.39

Postmark
Here

Sent To	Thomas Gallant
Street, Apt. No., or PO Box No.	Kindley Twp, 1271 Rt. 30
City, State, ZIP+4	Clinton, PA 15026

PS Form 3800, August 2006

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Thomas J. Gallant
 Chairperson, Kindley Twp
 1271 Route 30
 P.O. Box W
 Clinton, PA 15026

2. Article Number

(Transfer from service label)

7008 1300 0001 5416 4387

COMPLETE THIS SECTION ON DELIVERY

A. Signature

x Barbara Porter

☒ Agent

☐ Addressee

B. Received by (Printed Name)

BARBARA COATE S

C. Date of Delivery

2-3-12

D. Is delivery address different from item 1?

☐ Yes

If YES, enter delivery address below:

☐ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

BOARD OF SUPERVISORS

Thomas J. Gallant

Janet L. Craig

Raymond L. Chappell

Gary J. Klingman, *Manager*

Christopher J. Caruso, *Assistant Manager*



Township of Findlay

RECEIVED

FEB - 6 2012

1271 Route 30

P.O. Box W

Clinton, Pennsylvania 15026

Phone: (724) 695-0500

Fax: (724) 695-1700

Website: www.findlay.pa.us

CDM Smith Pittsburgh, PA

February 3, 2012

Daniel DePra, P.E., BCEE
CDM Smith, Inc.
503 Martindale Street
Suite 500
Pittsburgh, PA 15212

Dear Mr. DePra,

Thank you for the opportunity to review the Description of Proposed Action and Alternatives (DOPAA) for the land acquisition of T-Ramp property from Allegheny County Airport Authority. Upon review of the report, we do not have any comments or know of any environmental impacts.

If you have any questions, please feel free to contact me.

Sincerely,

Christopher J. Caruso
Zoning Administrator/Assistant Manager

CJC/cdh

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix L: Deed Restriction for Old Terminal Fuel Distribution System

This Deed Restriction is provided as part of the “Final Report - Statewide Health Standard Checklist and Final Report Summary, Pittsburgh International Airport, Old Terminal, Fuel Distribution Area” (see Appendix A, Reference no. 7).

(See following pages)



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

FINAL REPORT SUMMARY

This final report summary will assure the prompt review of the final report and will be the primary document used in understanding the site remediation long after the final report is approved. A clear final report summary is also important because liability protection under Section 501 of Act 2 applies to any contamination identified in reports submitted to and approved by the Department.

The final report summary is to be completed as a part of the final report. It is preferred that this form be completed in the electronic format. The form can be located on the DEP website at: <http://www.dep.state.pa.us/dep/deputate/airwaste/wm/LANDRECY/Forms/LRForms.htm>. After completion of the form, it should be printed and submitted to the appropriate regional office. The final report summary is to be bound separately from the final report and submitted in triplicate with the final report.

GENERAL SITE INFORMATION

To complete the general site information section, provide information concerning the site name, location, municipality, and county where the property is located.

Site Name: (use the name that the property is commonly known by, such as: ownership name, historical name, and redeveloper name)

Greater Pittsburgh International Airport
Old Terminal
Fuel Distribution System

Location of Property: (Provide street address or description of actual location of property)

The Pittsburgh International Airport property consists of over 10,000 acres. The Old Terminal portion of the property covers approximately 100 acres and includes the Fuel Distribution System. The Old Terminal property is bordered to the north by PA State Route 60 and is situated between the Coraopolis/Sewickley interchange and University Boulevard (formerly known as Beers School Road). The 911th Tactical Air Force Base is adjacent to the site to the east. Additional airport property is located west and south of the Old Terminal property.

Municipality: (If the property is located in more than one municipality, indicate names of all municipalities. If area of contamination, the site, is located in only one of the municipalities listed, indicate which municipality has the site location)

The Old Terminal property is located in Moon Township.

County: Allegheny

DESCRIPTION OF PROPERTY

Provide a general description of the property, including environmental setting and physical description, and types of former and current operations conducted on the property particularly those related to any release identified and/or remediated. Include a physical description of the property and identify manmade features and sources of contamination. Indicate whether the property is residential or nonresidential. Identify the area(s) of the property determined to be the site(s). Provide a property map (Attachment 1) to include a general layout with property boundaries, features (buildings, storage tank locations, process areas, roads, and utilities), surface water locations, sources of contamination, area of contamination (site) and sampling and well locations. Identify any existing waste management, air quality, or water management permits. Summarize the infrastructure available.

The former Greater Pittsburgh International Airport Old Terminal property served as the airport passenger terminal from 1952 to 1992, when the new Midfield Terminal opened. The Old Terminal remained vacant until it was demolished in 1999. The property is undergoing redeveloped with the construction of warehouses, offices, and an aviation center for private airplanes.

The Old Terminal Fuel Distribution System is located on a relatively flat section of the airport property at an elevation of approximately 1150 feet above mean sea level (MSL). The depth to bedrock ranges from approximately 1.5 to 30 feet below grade across the site. The area is drained by an unnamed tributary to McClarens Run to the east and McClarens Run to the west. Streams adjacent to the site range in elevation from approximately 1100 to 1000 MSL. The property is a non-residential. The surface of the property around the Old Terminal is covered with approximately 16-inches of concrete to accommodate aircraft. The concrete surface is contiguous with taxiways and runways to the south and west.

The Fuel Distribution System delivered jet fuel to service pits located around the 56 gates of the Old Terminal. The distribution system is approximately 7500 feet long and contains two 8-inch and one 10-inch diameter jet fuel distribution lines. The lines are approximately four to six feet below grade. During the operation of the distribution system it was pressure tested monthly by Aircraft Service International, Inc. None of the tests indicated the presence of a leak. However, through leaks and spills, the Fuel Distribution System is the source of the contamination found at the Old Terminal. Jet-A fuel was stored at the former Fuel Farm site, which is located northeast of the Old Terminal. CDM removed the storage tanks at the former Fuel Farm and cleaned and pressure grouted the pipelines of the Fuel Distribution System in 1994. (The former Fuel Farm is being treated as a separate site and a separate Act 2 Final Report Summary will be submitted).

Underground utilities at the site include electric, water, storm, sanitary, steam, communications, and Jet-A fuel.

Size of Property: The property size is approximately 100 acres.

Site Size: (Size of site(s) is actual size of the area(s) of soil, groundwater and sediment contamination on the property. Outline the area(s) on the property map so that each can be easily identified. If the extent of contamination is the entire property, provide a narrative describing how this was determined.)

There are six soil sites at the Fuel Distribution System where contaminant concentrations exceeded the Site Specific standards and where soil remediation was completed. The soil sites and sizes are listed below:

Soil site 1 - 100 feet by 17 feet; 0.04 acres
Soil site 2 - 90 feet by 40 feet; 0.08 acres
Soil site 3 - 30 feet by 40 feet; 0.03 acres
Soil site 4 - 22 feet by 21 feet; 0.01 acres
Soil site 5 - 33 feet by 35 feet; 0.03 acres
Soil site 6 - 27 feet by 15 feet; 0.01 acres

Acres of property not in use at time of submission of the Notice of Intent to Remediate (NIR):
Approximately 100 acres

Number of years this property sat unused: Approximately 8 years (1992-2000)

SITE CHARACTERIZATION

Summarize the results of the site characterization by describing property physical characteristics and the relationship between geologic setting, soil types, hydrogeology, and surface water to potential receptors. Provide a narrative summary of the conceptual site model (*details of the conceptual site model should be provided in the Final Report*). Describe the sources of contamination, contaminated media, background concentrations of constituents of concern (if applicable), extent and estimated volume of contamination, fate and transport of contaminants, migration pathways, and potential human and ecological receptors. Associate contaminated media (soil, groundwater, surface water, air, and sediment) to exposure pathways. Identify on a site map (Attachment 1) the area for which an Act 2 liability release is sought. State whether the property is located in a vicinity of area-wide contamination and if a non-used aquifer determination was approved. For each medium, provide a summary table (Attachment 2) highlighting the sampling point results which identify the constituents of concern making up the Act 2 "site" characterization data.

Site characterization data was collected by phased investigations over several years. Soil was characterized by extensive Geoprobe drilling along the Fuel Distribution System and soil sample collection and analysis. Groundwater was characterized by installing 20 monitoring wells in the overburden and bedrock, and sample collection and analysis. Stormwater was also characterized by sampling and analysis during precipitation events. Jet-A fuel leaks and spills caused localized soil contamination along the Fuel Distribution System. Due to low permeability soils and limited groundwater recharge and flux, contamination did not impact groundwater, as the groundwater samples met Statewide health, non-use aquifer, non-residential standards.

The stratigraphy at the site consists a concrete surface underlain by gravel subbase, which overlies silt and clay soil over shale and sandstone bedrock. Some of the soil was placed during construction operations (cut and fill) in 1946. Depth to bedrock varies at the site from 1.5 feet to 30 feet. Bedrock at the site is Pennsylvanian-age sedimentary rocks of the Conemaugh Group, which encompasses the stratigraphy between the bottom of the Pittsburgh Coal and the top of the Upper Freeport Coal in the Casselman Formation. The uppermost rock encountered within the project area is shale and siltstone of the Connellsville Sandstone.

Soil characterized as "site":

Acres: 0.2 acres

Volume (cubic yards): 2,305 tons of soil were characterized as exceeding the cleanup criteria and were subsequently excavated and properly disposed off-site.

Total area or volume of soil characterized: Approximately 100 acres

Groundwater characterized as "site": Acres: 0.0 ; The groundwater meets Statewide health standards.

SITE REMEDIATION:

In the site remediation section, indicate which cleanup standard was used, or whether the site was remediated as a special industrial area. Identify the contaminated media (soil, groundwater, air or sediment) and contaminants of concern addressed. Summarize the cleanup levels (remediation goals) selected in each applicable medium for every applicable contaminant of concern. For Statewide health standard cleanups, identify whether the site is residential or nonresidential. Indicate if a non-use aquifer determination was used (*provide a copy of the Department approval of the non-use aquifer determination as an attachment in the Final Report*). Indicate if pathway elimination measurements were used if remediation is a site-specific standard. Indicate if an area-wide background standard was used.

Describe the remediation performed. Identify the point of compliance by media and contaminant. Provide the reason if the point of compliance is different than the property line. Provide summary tables showing the levels of contamination remaining at every attainment sampling point (Attachment 3).

Provide all maps, plans, and summary tables as indicated as attachments in the final report summary.

For each medium, provide a summary table (Attachment 8) of all characterized substances (INCLUDE CAS NUMBER), indicating highest concentration found during site characterization and what numeric standard was applied and the name of the standard (background, Statewide health or site-specific). Under the site-specific standard using PATHWAY ELIMINATION, use ZERO for the numeric standard.

The contaminant of concern at the Fuel Distribution System is Jet-A fuel. The six soil sites were remediated to the Site Specific standards developed in the approved January 1997 Cleanup Plan. The soil standards for areas within 50 feet of future buildings are: 14,000 mg/kg petroleum hydrocarbons-diesel range organics (PHC-DRO); 1.8 mg/kg benzene; 6,900 mg/kg toluene; 40,200 mg/kg ethylbenzene; 760 mg/kg cumene; 1,760 mg/kg trimethylbenzenes; and 3,800 mg/kg butylbenzenes. The soil standard for areas greater than 50 feet from future buildings is 19,000 mg/kg PHC-DRO.

Soil remediation consisted of excavating contaminated soil to the prescribed depth and boundaries determined during the contamination delineation phase. The soil was removed from the excavation and loaded directly into trucks. The beds of the trucks were lined with plastic sheeting. The excavated soil was transported to Browning-Ferris Industries (BFI) Imperial Landfill in Imperial, Pennsylvania for disposal. A total of 2,305 tons of soil was excavated and transported to the landfill for disposal. Manifests for non-hazardous waste accompanied each truckload of soil transported to the landfill. In addition, the Fuel Distribution System pipelines within each of the six remediation areas were removed using an excavator. The piping that was to remain in place, which was previously abandoned by grouting, was cut at the boundaries with the remediation areas. A total of 733.5 linear feet (35.86 tons) of pipelines was removed and transported to the BFI Imperial Landfill for disposal. Perched water was encountered during excavation at Area 2, Area 3 and Area 4 along the Southeast Dock. The perched water was removed from the excavations, pumped into tankers and transported to Everclear in Austintown, Ohio for treatment and disposal. A total of 105,387 gallons of perched water was transported to Everclear for disposal.

CDM collected post-excavation soil samples from the sidewalls and floors of each remediation area according to the PaDEP-approved, CDM Cleanup Plan dated January 1997. Samples were obtained from the excavation sidewalls and floor and analyzed for the appropriate parameters in accordance with the cleanup plan risk assessment and follow-up correspondence with PaDEP. A total of 34 soil samples, including two duplicate samples, was analyzed for PHC-DRO via EPA Method 8015 modified. In addition, 15 soil samples from Area 1 and Area 3 were analyzed for BTEX, isopropylbenzene, butylbenzenes, and trimethylbenzenes via EPA Method 8260. Soil samples were analyzed within 36 hours of sample collection. Backfill activities began at each area immediately following confirmation by laboratory analysis that the cleanup goal was attained at the points of compliance, which are the limits of the soil excavation.

The number of post-excavation soil samples collected differed from the number proposed in the Cleanup Plan at Area 1, Area 2, and Area 6. Additional soil samples were collected at Area 1 and Area 6 due to soil

staining observed after the excavation. Two additional soil samples were collected at Area 1 and one additional soil sample was collected at Area 6. Due to shallow bedrock encountered at Area 1, only one soil sample could be collected from the floor. Only five soil samples, instead of the 10 samples specified in the Cleanup Plan, could be obtained at Area 2 because shale bedrock was encountered at a shallow depth on the sidewalls and floor of the excavation. The attached figures depict the locations of the post-excavation soil samples that were collected at each of the six remediation areas.

For applicable media, provide a description of the type and volume of wastes and media removed from the site or remediated on site.

Volume of soil media removed from site as part of remediation: 2,305 tons

Volume of soil media treated and remaining on site: Not applicable

Volume estimate of groundwater remediation: Not applicable

Area (surface) of groundwater plume: Not applicable

Acres where pathway elimination has been performed: 0.2 acres

DEED NOTIFICATION (as applicable)

Sites where to a site-specific standard, a non-residential Statewide health standard, or sites remediated as a special industrial area are required to comply with the deed acknowledgment requirements of Act 2. The deed notice requirements referenced in Act 2 pertain to requirements of the Solid Waste Management Act and/or the Hazardous Sites Cleanup Act. The grantor in every deed for the conveyance of property, on which hazardous waste is presently being disposed or has been disposed, shall include in the property section of the deed an acknowledgment of such hazardous waste disposal. If a property conveyance relevant to the above requirement has occurred, include a copy of the deed presenting such language to the Department.

Separate from the above, Section 304 of Act 2, which pertains to site-specific standard remediation, states that the site-specific standard may be attained through a combination of measures. This includes institutional controls. One form of an institutional control is land use restrictions. Land use restrictions are documented through deed notices. To properly demonstrate attainment an institutional control has to be in place and documented in the final report. The Department's expectation for compliance with this requirement is for the deed restriction language to be included within the final report and within six months of the final report approval a copy of the deed with the deed restriction language presented to the Department.

Will remediation of this site require a deed acknowledgment? ☐ Yes ☒ No

Has a property conveyance occurred since the approval of this remediation? ☐ Yes ☒ No

If yes, provide the text of the deed notice wording below.

The airport property is owned by Allegheny County and there are no plans to sell or convey the property.

Does the remediation at this site involve deed restrictions as an institutional control (applicable only to a site-specific standard remediation)? ☐ Yes ☒ No

If yes, provide the text of the deed restriction wording below.

REMIEDIATOR, CONSULTANT, OTHER

Remediators name, addresses, and phone numbers: (Identify all that are eligible to receive release of liability for remediation of the site)

Thomas Somerville, P.E.
Director of Engineering and Construction
Allegheny County Airport Authority
Pittsburgh International Airport
1000 Airport Boulevard
Suite 4000
P.O. Box 12370
Pittsburgh, PA 15231-0370
(412) 472-3534

Consultant names, addresses, phone numbers:

Brad D. Cook, P.G.
Camp Dresser & McKee Inc.
2740 Smallman Street, Suite 100
Pittsburgh, PA 15222
(412) 201-5500

PaDEP Environmental Cleanup Program Staff Contact:

John J. Matviya
Regional Manager, Environmental Cleanup Program
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222
(412) 442-5811

ATTACHMENTS

1. General site layout (with property boundaries) map which includes area of Act 2 liability release.
2. Summary tables of site characterization data.
3. Cross-section figures showing extent of contamination and sampling points.
4. Figures illustrating conceptual site model interpretations.
5. Plan views and cross-sections of contamination with superimposed remediation activities (e.g. removed soil or capped section).
6. Plan view figures showing extent of contamination and sampling points.
7. Summary tables of attainment data.
8. Summary tables of highest concentrations found during characterizations and final standard applied.

**Final Environmental Assessment and Environmental Baseline Survey
Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority
August 9, 2012**

Appendix M: Notice of Availability and Proof of Publication

(See following pages for the Notice of Availability and Proof of Publication of this notice in the Pittsburgh Tribune Review and Pittsburgh Post Gazette.)



503 Martindale Street, Suite 500
Pittsburgh, Pennsylvania 15212-5722
tel: 412 201-5500
fax: 412 231-0301

August 3, 2012

DOCUMENT FOR PUBLIC COMMENT

Draft “Finding of No Significant Impact (FONSI)” for the Environmental Assessment of Proposed Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority at Pittsburgh International Airport Air Reserve Station, PA

The 911th Airlift Wing (911 AW) is proposing to lease from the Allegheny County Airport Authority a ~26 acre parcel of property (“T-Ramp”) on the airfield of the Pittsburgh International Airport, adjacent to their currently leased area.

An Environmental Assessment / Environmental Baseline Survey (EA/EBS) was conducted to evaluate the impacts of the proposed action and alternatives on the environment. Based on the analysis of this EA/EBS, the proposed action would not result in significant impacts on the environment. Therefore, a Finding of No Significant Impact (FONSI) is warranted and an Environmental Impact Statement is not required for the proposed action.

Copies of the Draft FONSI and EA/EBS describing the analysis are available for review at the 911 AW Visitors Center Facility, Moon Township Public Library, Moon Township Municipal Building, and Findlay Township Municipal Building.

Written comments and inquiries on the Draft FONSI and EA/EBS will be accepted through September 2, 2012 and should be directed to Mr. Daniel DePra, CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212-5722.



No. _____

Term, _____

Proof of Publication of Notice in Pittsburgh Post-Gazette

Under Act No 587, Approved May 16, 1929, PL 1784, as last amended by Act No 409 of September 29, 1951

Commonwealth of Pennsylvania, County of Allegheny, ss M. Goodwin, being duly sworn, deposes and says that the Pittsburgh Post-Gazette, a newspaper of general circulation published in the City of Pittsburgh, County and Commonwealth aforesaid, was established in 1993 by the merging of the Pittsburgh Post-Gazette and Sun-Telegraph and The Pittsburgh Press and the Pittsburgh Post-Gazette and Sun-Telegraph was established in 1960 and the Pittsburgh Post-Gazette was established in 1927 by the merging of the Pittsburgh Gazette established in 1786 and the Pittsburgh Post, established in 1842, since which date the said Pittsburgh Post-Gazette has been regularly issued in said County and that a copy of said printed notice or publication is attached hereto exactly as the same was printed and published in the regular editions and issues of the said Pittsburgh Post-Gazette a newspaper of general circulation on the following dates, viz:

03, 04, 10, 11 of August, 2012

Affiant further deposes that he/she is an agent for the PG Publishing Company, a corporation and publisher of the Pittsburgh Post-Gazette, that, as such agent, affiant is duly authorized to verify the foregoing statement under oath, that affiant is not interested in the subject matter of the afore said notice or publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.

M. Goodwin
PG Publishing Company

Sworn to and subscribed before me this day of:
August 13, 2012

Linda M. Gaertner
COMMONWEALTH OF PENNSYLVANIA

Notarial Seal
Linda M. Gaertner, Notary Public
City of Pittsburgh, Allegheny County
My Commission Expires Jan. 31, 2015
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

STATEMENT OF ADVERTISING COSTS

CDM Smith
503 MARTINDALE ST STE 500More th
PITTSBURGH PA 15212-5730

To PG Publishing Company

Total ----- \$1,746.60

Publisher's Receipt for Advertising Costs

PG PUBLISHING COMPANY, publisher of the Pittsburgh Post-Gazette, a newspaper of general circulation, hereby acknowledges receipt of the aforesaid advertising and publication costs and certifies that the same have been fully paid.

Office
34 Boulevard of the Allies
PITTSBURGH, PA 15222
Phone 412-263-1338

PG Publishing Company, a Corporation, Publisher of
Pittsburgh Post-Gazette, a Newspaper of General Circulation

By Maria Quee

I hereby certify that the foregoing is the original Proof of Publication and receipt for the Advertising costs in the subject matter of said notice.

Attorney For**COPY OF NOTICE
OR PUBLICATION****NOTICE OF AVAILABILITY**

Draft Finding of No Significant Impact for the Environmental Assessment of Proposed Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority at Pittsburgh International Airport Air Reserve Station, PA.

Pittsburgh IAP ARS, Pennsylvania - The 911th Airlift Wing (911 AW) is proposing to lease from the Allegheny County Airport Authority a ~26 acre parcel of property ("T-Ramp") on the airfield of the Pittsburgh International Airport, adjacent to their currently leased area.

An Environmental Assessment / Environmental Baseline Survey (EA/EBS) was conducted to evaluate the impacts of the proposed action and alternatives on the environment. Based on the analysis of this EA/EBS, the proposed action would not result in significant impacts on the environment. Therefore, a Finding of No Significant Impact (FONSI) is warranted and an Environmental Impact Statement is not required for the proposed action.

Copies of the Draft FONSI and EA/EBS describing the analysis are available for review at the 911 AW Visitors Center Facility, Moon Township Public Library, Moon Township Municipal Building, and Findlay Township Municipal Building.

Written comments and inquiries on the Draft FONSI and EA/EBS will be accepted through September 2, 2012 and should be directed to Mr. Daniel DePra, CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212-5722.

TRIB TOTAL MEDIA LEGAL ADVERTISING

Proof of Publication of Notice in The Tribune-Review

Under the Act of July 9, 1976, P. L. 877, No. 160

Commonwealth of Pennsylvania

County of Westmoreland } SS:

DALYNN SCIOTTO, Classified Advertising Manager of the Trib Total Media, Inc., a corporation of the Commonwealth of Pennsylvania with places of business in Greensburg, Westmoreland County, Pennsylvania and Pittsburgh, Allegheny County, Pennsylvania, being duly sworn, deposes and says that the **Tribune-Review** is a daily newspaper circulated in Southwestern Pennsylvania. Said corporation was established in the year 1924. A copy of the printed notice of publication is attached hereto exactly as the same was printed and published in the regular editions of the said daily newspaper on the following dates, viz:

LEGAL# 5345398, RE: NOTICE OF AVAILABILITY (PITTSBURGH IAP ARS, PENNSYLVANIA); 3RD, 4TH, 10TH AND THE 11TH DAY OF AUGUST, 2012.

Affiant further deposes that s/he is an officer duly Authorized by the Trib Total Media, Inc., publisher of The Tribune-Review, to verify the foregoing statement under oath and also declares that affiant is not interested in the subject matter of the aforesaid notice of publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.

[Signature]
Classified Advertising Manager,
Trib Total Media, Inc.

Sworn to and subscribed before me this
13TH day of AUGUST, 2012.

[Signature]
Notary Public

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal

JoAnn M. Callahan, Notary Public
City of Greensburg, Westmoreland County
My Commission Expires July 1, 2016

MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Statement of Advertising Costs

LYNNE A. NESTLER, ADMIN. MANAGER-MID ATLANTIC REGION
CDM SMITH
503 MARTINDALE ST., SUITE 500
PITTSBURGH, PA 15212

To Trib Total Media, Inc.

For Publishing the notice or advertisement attached

hereto on the above stated dates \$800.64

Probating Same \$ 0

Total \$ 800.64*

Publisher's Receipt for Advertising Costs

The Trib Total Media, Inc., publisher of The Tribune-Review, acknowledges a receipt of the aforesaid advertising and publication costs, and fully paid.

Trib Total Media Inc., Publisher
of The Tribune-Review, a Daily Newspaper.

By *[Signature]*

NOTICE OF AVAILABILITY
Draft Finding of No Significant Impact for the Environmental Assessment of Proposed Lease Acquisition of T-Ramp Property from Allegheny County Airport Authority at Pittsburgh International Airport Air Reserve Station, PA. Pittsburgh IAP ARS, Pennsylvania - The 911th Airlift Wing (911 AW) is proposing to lease from the Allegheny County Airport Authority a ~26 acre parcel of property ("T-Ramp") on the airfield of the Pittsburgh International Airport, adjacent to their currently leased area.

An Environmental Assessment / Environmental Baseline Survey (EA/EBS) was conducted to evaluate the impacts of the proposed action and alternatives on the environment. Based on the analysis of this EA/EBS, the proposed action would not result in significant impacts on the environment. Therefore, a Finding of No Significant Impact (FONSI) is warranted and an Environmental Impact Statement is not required for the proposed action.

Copies of the Draft FONSI and EA/EBS describing the analysis are available for review at the 911 AW Visitors Center Facility, Moon Township Public Library, Moon Township Municipal Building, and Findlay Township Municipal Building.

Written comments and inquiries on the Draft FONSI and EA/EBS will be accepted through September 2, 2012 and should be directed to Mr. Daniel DePra, CDM Smith, 503 Martindale Street, Suite 500, Pittsburgh, PA 15212-5722. 5345398(8-3,4,10,11-12)